TRANSLATION

NATIONAL ECONOMIC AND SOCIAL DEVELOPMENT PLAN REVISED COPY B.E. 2511 (1968)

OFFICE OF THE NATIONAL ECONOMIC DEVELOPMENT BOARD

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CHAPTER ONE

SUMMARY AND PROPOSALS

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1. OBJECTIVES OF THE ANNUAL PLAN.

In approving the second National Economic and Social Development Plan (1967-1971), the Cabinet has authorized the NEDB to make adjustments or revisions in the Plan every year, for reasons which can be summarized as follows:

"As the second Development Plan is to cover a period of five years, it is felt that circumstances and conditions may change during that time. Therefore it is advisable that the Plan be revised and adjusted to keep pace with these developments. To this end, the NEDB, in co-operation with the other governmental bodies concerned, is authorized to review and revise the National Economic and Social Development Plan each year, starting in 1968. Emphasis is to be placed on such matters as the evaluation of progress; adjustment of objectives; clearance of main obstacles; considerations of the financial situation and the budgets for various development projects. Such revisions or adjustments must be first approved by the NEDB before being submitted to the Cabinet each year".

The economic situation of Thailand is always influenced by such changeable factors as climate, natural phenomena and fluctuations of foreign trade. At present, the military and political situation in South-East Asia has necessitated increased defense expenditures by the Thai government. The U.S. military expenditures have also increased, particularly those involving construction work and allied services. These everchanging circumstances and conditions have induced changes in the economic situation in Thailand so that it is most fitting now to review and adjust economic development projects to keep pace with the changes of the past year and those which can be expected in the coming years.

In preparation for the second five year National Economic and Social Development Plan, the aims, policy, budget and framework were worked out in detail only for the first year; the policy, budgets and framework of the later years were only estimated. Thus, annual development planning will help to adjust the aims, economic policy, and other financial aspects of the various projects, as well as effecting improvement in the planning of the general economy.

2. GENERAL ECONOMIC SITUATION, AND CERTAIN ADVERSE EFFECTS ON THE NATIONAL DEVELOPMENT PLAN DURING THE YEAR 1967-1968.

During the period covered by the first National Economic and Social Development (NESD) Plan, agricultural production has increased at an average rate of 5 percent per annum, though the rate of increase has not always been constant. It may have been a 9 percent increase for one year, and a 2 percent increase for another. This illustrates that agricultural yields still depend a great deal on local climatic conditions.

The drought experienced during the 1967 growing season left its mark on the agricultural production of that year, as can be seen from statistics provided by the Department of Rice, which show that the rice-growing area in 1967 was reduced by 10-20 percent compared with the preceding year. The region that had the severest attack and suffered the most damage was the North-East, where it is estimated that only 60 percent of the paddy fields, out of roughly a 21-million rai area, could be cultivated. Exact production figures for the 1967-1968 season are not as yet known, but it is estimated that the entire rice production of the country declined to a rough quantity of 10 million tons, in comparison to the 11.8 million tons rice yield estimated for the 1966-1967 season. The results of the 1967-1968 rice production will greatly affect the general economy of the country, as rice is both

the staple diet of this country and its major export. Income of farmers whose rice harvests have failed will also be reduced considerably, so that at the moment, the authorities concerned are sending out officials to make a survey of the various regions damaged by the drought and of the failure of the harvests.

Production of other main crops such as maize, jute and sorghum were also affected by this drought, and preliminary estimates indicated that about 30-50 percent of these had been damaged. The maize production in 1967 is not expected to exceed one million tons in comparison to the 1.2 million tons produced in 1966, while Kenaf yields will also decline from 510,000 tons to only 260,000 tons. Sorghum, of which 100,000 tons had been produced in 1966, had a 50 percent ratio of damage.

Prospects of foreign markets for the agricultural products of Thailand for 1968 are not assessed as being bright, for the price of most of the products exported tends to be on the decline. It is estimated that the price realized for Thai maize in foreign markets will also be lower as a consequence of the increased production of yellow corn in the U.S.A. during this period. It is assessed that commercial prospects of jute for 1968 will be considerably lessened both in the quantity exported, and in the price obtained, because India, which is a major importer of Thailand's jute, has greatly reduced its jute orders, now that it is able to produce almost enough jute of its own.

Commercial prospects for the production of Thai potatoes for 1968 are not very good either, as the Common Market in Europe has introduced higher duties on Thai potatoes thereby reducing the income that Thailand can expect to receive for its potatoes. Even though Japan provides a new market for Thai potatoes, it absorbs only a small quantity which will not in any way help raise the price. It is estimated, however, that in 1968, rice will remain at the same level as in 1967, since the demand for rice is still high. The price for rubber, on the other hand, which declined greatly in 1967, is expected to remain at the same level, or to fall even lower.

As both the volume of production and the price obtained in foreign markets for most of Thailand's agricultural products have declined, there has been a drop in the rate of the growth of value for agricultural products. For instance, during the period covered by the first NESD Plan (1961-1966), the rate of growth of agricultural products' value averaged 5 per cent per annum. This was reduced to 2.2 percent per annum in 1967 in comparison with 1965, and it is believed that this will drop further to the rate of 0.6 percent per annum in 1968, in comparison to 1967.

As the value of agricultural products of Thailand has been on the decline, the targets of the Second National Economic and Social Development Plan for 1967-1968 production, cannot therefore be met, as will be explained below:

2.1 Rate of National Economic Development.

The second NESD Plan made the assessment that Thailand could increase its (GDP) gross domestic product at the rate of 8.5 percent per annum. However, it has turned out that the true GDP growth Rate is below that estimated; that is only a 7 percent rate of increase for 1967 was realized. A 6 percent rate of growth of GDP is estimated for 1968 after adjustments have been made to meet the changed economic conditions. However, the drought can be considered an irregular condition, so that the economy of the country could well revive and improve, so as to reach the goals set up for the later years.

Table 1.1: The Growth rate of Gross Domestic Product.

	Second NESD Plan	Revised Rate for 1968
1966	8.5	8.1
1967	8.5	7.1
1968	8.5	6.0

Note: The rate is calculated in percentages based on 1965 constant prices.

2.2 Rural Development, and the Distribution of Development Benefits to People of Different Regions.

Even though the government has made every effort to accelerate its work on the Rural and Agricultural Development Program to raise the standard of living and to improve the conditions of people in various regions, according to the course and aims of the 5-year Plan, the results have not been satisfactory in every district within this short period of time. Thus, the decrease in value of agricultural products as the consequence of drought and fluctuations in the foreign markets have a direct influence on the income, employment, and standard of living of rural dwellers. Besides, the decreased rice production most directly struck the inhabitants of the North-East and the lower part of the North, where the majority of the people were already in lower income brackets than in other regions. On the other hand, the inhabitants of the South, who are much better off than people in other regions, also have had to face the lowest price slumps ever in the history of their rubber production, so the economic situation in the South is not as good as it was before. Moreover, there are many distant and barren lands where the inhabitants have to face danger and threats from terrorists and saboteurs, where special development projects and other kinds of encouragement must be put to work.

2.3 Economic and Monetary Stabilization.

During the period covered by the First National Economic and Social Development Plan, particularly during 1960-1965, economic development was introduced while prices remained stable. Operations of monetary and financial policies, together with movements in foreign trade have resulted in a reasonably increased rate in our monetary stock, while the consumer price index has increased only at the rate of 1.5 percent per year. In 1966, however, commodity prices, food, agricultural products and construction materials greatly increased, with the consumer price index for Bangkok and Thon Buri rising by 3.8 percent, and the index of food prices increased by 6.5 percent in that year. The main causes for such price increase may be primarily attributed to a lack of supply while the expenditures of foreign soldiers in this country could be said to have caused pressure as well on the general price level, particularly on the price of construction materials, labor costs, and other services. Restrictions on the rice export quota at the end of 1966 and during 1967 have slowed the rate of price rise. Prices of construction materials have been on the decline since September 1967, once a relaxation was made on certain imports such as cement and plywood. The decline in rice production and other food productions during 1968 at the height of demand, will also put high pressure on the prices of these commodities.

2.4 Balance of Trade and Balance of Payments.

Goods and services exported in 1967 increased at the rate of 9.0 percent, while goods (excluding military products) and services imported increased at a rate of 16 percent, thus making an increase of 2,600 million Baht in the trade deficit over 1966. But the income from investments, loans, and foreign aid is still at a high level, and this compensates for the deficit in the trade balance. The consequence is seen in a rise in the Foreign reserve funds of 1,300 million Baht. For 1968, a decrease of about 8 percent from the 1967 rate is estimated in the export of Thai merchandise and services, while the droughts and weather conditions which reduced the volume of rice production will reduce the quantities of rice exported as well, for it will be necessary to retain a sufficient amount of rice for domestic consumption.

For other export items, such as tin, maize, and jute, the prices in foreign markets as well as the volume of exports are expected to decline. Other than these, the national revenue obtained from other services, particularly from the expenditure of the U.S. soldiers in Thailand has already reached a high level and is not expected to rise as quickly as during the preceding years.

Goods and services imported for 1968 are estimated to increase at the rate of 3.7%, while there will be an even greater deficit in the trade balance for 1968. There may be a

decrease in the international reserve funds for the first time in eight years, as Thailand has had an increase in her reserves every year since 1960. Preliminary estimation is that there may be a deficit of 740 million Baht in the balance of payments compared to 3,287 million Baht, and a 1,300 million Baht surplus for 1966 and 1967 respectively.

2.5 Work on the Economic and Social Development Projects

Most of the work carried out on economic and social development projects has been in accordance with the schedules and aims of the Plan. Nevertheless, there are still many important projects which have not been completed on schedule, such as the project for the construction of the multi-purpose dam at Nan; agricultural development; the establishment of an industrial estate; the improvement of the Metropolitan Telephone Service; the Improvement of Don Muang Airport; the construction of a new bridge across the Chao Phaya River, and the development of vocational education, etc.

3. PROJECTS AND EXPENDITURES UNDER THE ECONOMIC AND SOCIAL DEVELOPMENT PLAN FOR 1968.

Expenditures from the Budget set aside for national defense and maintenance of internal order for the fiscal year of 1968 will far exceed that shown in the second NESD Plan. Expenditures incurred within the NESD Plan will be 13,471 million Baht, out of which 8,844 million Baht will come from the Budget, 1,883 million Baht from the income of governmental enterprises and local administrative bodies, and 2,744 million Baht from foreign aid and loans.

The budget of 13,471 million Baht for this NESD Plan for 1968 is 335 million Baht lower than that estimated in the second NESD Plan. This difference is caused mainly by changes in the projects falling within the budgets of communication-transport, public utilities, and educational developments.

Table 1.2: Comparision of Expenditures for the Development Projects under the Original Second NESD Plan and under the Annual Revised Plan for 1968

(million Baht)

Sector	2nd NESD Project	Revised NESD Project for 1968 1/
Agriculture & Cooperatives	2,077.62	2,100.20
Industry & Mining	354.10	343.30
Communication & Transportation	3,763.18	3,646.60
Power	1,105.15	1,237.80
Commerce	39.00	4.50
Social & Public Utilities	1,946.55	1,750.00
Public Health	644.43	620.00
Education	3,250.53	3,024.20
Central Budget	625.00	745.00
TOTAL	13,805.56	13,471.60

1/ Expenditures met by the National Budget have been in the same amount as reported in the 1968 Budget Documents.

Various problems encountered in the organization of these Projects, their administration and operations as well as in foreign loans effected for the use of several important economic and social developments, are the main factors for the under-expenditure during the year, below that allowed by the NESD Plan. Thus, 3,000 million Baht is carried over from the budget for the fiscal year of 1966 (part of which may be retained for payment

during the next fiscal year) while this sum is increased to 4,300 million Baht, together with the credit account of the 1967 fiscal year. Most of this sum is earmarked for economic and social development projects.

(For details of projects which have been approved by the Revised NESD Plan for 1968, see chapters 5, 6, and 7.)

4. PROPOSALS FOR REVISIONS AND ADJUSTMENTS OF POLICY, AND DEVELOPMENT PROJECTS FOR THE YEAR 1968.

Most of the projects for economic and social development for the year 1968 have already been laid down by work schedules in the second NESD Plan. But, as economic situations have changed somewhat from the original plans made, and some important projects are delayed and have not kept pace with the purposes of national development, it is fitting that bases of policies and certain important development projects be reviewed and revised as follows:

4.1 Revisions of the Agricultural Development Plan, and the Regional Development Plan.

Drought, and problems caused by the slumping prices of agricultural products in foreign markets have had severe effects on internal agricultural production, so that it is necessary for the government to introduce measures to solve such problems without delay. Such measures should solve the immediate problems as well as long-term measures which would promote definite increased and rapid production.

4.1.1 Short-term measures for the immediate problems.

(1) Arrangement should be made to have seeds and fertilizers distributed to farmers whose crops have been ruined. Authorities concerned are already carrying out such measures, but the extent of such aid will have to be extended further. Mobile promotional aid should be specially set up for this purpose, particularly in areas which have suffered the most severe damage.

(2) Help should be given to irrigate farmer's lands cultivated during the dry season, and development of efficient irrigation systems which would be able to draw in water resources for crop cultivation purposes must be accelerated.

(3) Agricultural credit assistance is to be extended as much as possible, including compromises made in the payment of debts in areas where there has been serious damage.

(4) Measures must be introduced to solve the problem of the falling income of rural inhabitants who have been hit worst by the drought, such as in the Provinces of Maha Sarakham, Roit-Et, Kalasin, and Loei, by increasing the use of local labor in the districts for such work as the construction of roads linking the villages, expansion of local wells, and digging irrigation canals-particularly small irrigation projects such as the construction of reservoirs, etc. At the same time, the Department of Labor should be encouraged to extend its employment services to the districts concerned to promote the movement of the labor force which will help the inhabitants of the distressed area to move to other districts where they can find employment.

4.1.2 Long-term Measures.

(1) Water resources, particularly in the North-East, West, East, and in the South, should be developed by giving particular attention to small irrigation projects which require small investment, but which can produce quick results. Development of water-channelling systems from the existing reservoirs must be accelerated to produce effective results.

Surveys should be made of areas which are situated far from rivers and streams, so that irrigation systems and wells can be introduced. In general, the use of water from the various irrigation projects has not been fully utilized therefore the relationship between dam-construction and the use of water within irrigated areas should be worked out and balanced more efficiently.

(2) The cultivation of crops with high yields is another important factor in increased productivity. The government should, therefore, introduce a project to accelerate the cultivation of such crops by seeking co-operation from farmers, in making an individual contract with each of them to sell to the government, which would in turn use such crops for introduction to other farmers.

(3) Adequate agricultural credit should be extended to each farmer so as to produce better results. The repayment of debts should be accepted on agricultural produce, as is done at the Co-operative Community at Swankhalok, so that a farmer does not have to sell his produce hurriedly at a low price in order to get some cash to pay off his debts. The credit-system of the rural development program in the North-East should take the form of multi-purpose credit, while unions of various types of farmers at different levels should be widely expanded for the benefit of this operation.

(4) Information and technical aid in both production and distribution must be provided for farmers, so that they are encouraged to grow crops which have good markets both abroad and domestically. Means should be found to encourage farmers to grow the crops demanded in the market, by special arrangement of policies on price and marketing.

(5) Aid given to farmers must be complete in every way economically possible, namely, in the use of land, the productive factors including available credit, communication, transport, markets, price, as well as security in its various aspects. Such complete help should be part of the Regional Development Projects. Even through the Regional Development Projects have already been initiated by the establishment of five committees for the five Regions, namely, Committees for the development of the North; North-East; Central; East; and South, development projects laid out so far for such regions were nevertheless only preliminary steps. More complete development projects should be set up as a base to promote and bring about the collaboration of various governmental bodies presently carrying out the related works and to provide natural resources either to be found within the country, or with the aid of foreign countries, to meet the real demands of the people of each individual Province particularly so that inhabitants of distant and barren areas benefit from the more general economic development of the country. USOM will co-operate in the development projects of the North-East, while the U.N. Economic Advisory Organization will help with development planning in the North. Projects should also be formulated for the development of the South which is facing the problem of the rubber price slump and of finding ways to increase productivity in other fields.

4.2 Revisions of Manpower Policy.

The main problem in manpower is the lack of people with vocational training, experience and adaptability. Education at all levels, ranging from projects for the development of universities, vocational education, and training centers to raise the standard of workers' proficiency, should be improved quickly. Vocational training should be provided to meet the demands of the labor markets. In addition to this, there are other aspects of the manpower problem which need to be adjusted in 1968, such as the problem of coordination of work between project goals, financial allocations and the existing labor force, which are all closely related. Such problems have already been jointly discussed in the preliminary steps taken by the NEDB, the Budget Bureau, and the Civil Service Commission, which should be further encouraged to insure complete collaboration for efficiency and the best results in the future. In so far as salaries, incomes, and other means of compensation for civilians in general are concerned, there is a serious problem, because the general price of goods has been on the increase, and the small wage-earner has been faced more and more

with the problem of the high cost of living. The Committee which has been formed by the Department of Labor and other governmental bodies concerned as well as representatives of the private enterprises, should jointly study this problem, and work out proposals for further consideration of the government without delay.

4.3 Acceleration for Development of Public Utilities.

As the critical shortage in the services of public utilities in the Metropolis as well as in other communities seems to increase more and more, improvement in the services of such public utilities should be made without delay to meet the needs of the increased population in the various communities, particularly in the Metropolis. Projects which rank high in priority for the accelerated work in the fiscal year of 1968 are as follows:

(1) The expansion of the Metropolitan Telephone works. Work according to the Master Plan for the Metropolis which had originally been planned for 1967, to be completed by 1971 has had to be delayed for another year, as it was not possible to find a source of foreign loans. Hence no effective work could be carried out. Therefore, the work will have to be accelerated in 1968, while revisions in the Project must be made for further improvement.

(2) Water Supply and Drainage System for the Metropolis. Acceleration of surveys and joint planning for the two Projects are made by the advisory Engineering Company. Drainage pipes will be laid from Rama 4 Road leading out to the Chao Phaya River, while the Sewage pipes will be established together with an experimental sewage purifying plant. Surveys have been made on leakages in the water distribution system, and urgent repairs will be made both in the filtering process and in the distribution system.

(3) Improvement of Residential Areas in the Provinces. Improvements in the water system of 22 provinces, with new construction in 12 others are planned. Besides, foreign aid will be received from many countries for planning and drafting of water-systems and work in the various provinces.

(4) Town-planning and supervision of construction works. Acceleration in the improvement of the Metropolitan town-planning is recommended, as well as the enactment of a law on land use and improvements in the law on the supervision of construction work.

(5) Housing. Other than the construction of house already planned for 700 families with small incomes, consideration will have to be given to obtain foreign loans and assistance for the purpose of arranging and improving residences and dwellings in the Metropolis. Means must be found to start the construction of houses for the average-income families in such a way that the investment made can be fruitful.

(6) Problem of Traffic jams in Bangkok-Thon Buri. Development of the present road network, by improvement of 10 roads, with attention to congestion problems, and by the construction of by-pass roads around Bangkok, thus avoiding the necessity of having to pass through the heart of the city will be carried out. Also, the construction of a bridge across the Chao Phaya River, at Ta Chang Wang Na will be accelerated. At present, the Japanese government is giving assistance. Surveys have been started, and the drafting work will be completed before September 1968. At the same time, surveys will also be made of various locations for the construction of bridges across the Chao Phaya at other points.

(7) Surveys of the Transportation system. It is estimated that work with the Survey Group could be started in 1968, with the assistance of the U.S. This survey work will have to be carried out with rapidity for the benefit of the planning and improvement in the transportation system of the country in the future. At present, USOM has already approved the aid in principle, and is studying the definite framework and boundaries of the surveys.

(8) Surveys of a second deep-sea port. It is expected that assistance will be given by the Netherlands government, and that such surveys could be started this year.

(9) Improvement of Don Muang Airport. Don Muang Airport is presently facing the problem of congestion in landing space as well as in the airport buildings, so it is necessary to introduce rapid improvements to enable the airport to be used with ease and safety, particularly during the period prior to the completion of the new International Airport. This Project has already been approved by the Cabinet, and will proceed during 1968.

(10) Development of the Railways. Work on railways development according to the 1967 fiscal year of the NESD Plan has been somewhat delayed, so the 1968 fiscal year must meet the demands by providing diesel engines, passenger trains, and freight trains to replace the old equipment which is now obsolete. The number of such engines and trains must be increased to meet public demand.

(11) Problem on the shortage of electricity. As the amount of rainfall for the last 2-3 years has been unusually low, it will be necessary to set up gas-turbine electricity generators at several power stations, and to accelerate the construction work laid out in various projects so that these can be completed before schedule.

4.4 Revisions of the Monetary and Financial Policies.

The economic situation and the questions of national security which changed in 1967 and 1968 will affect the financial and monetary policies of 1968 in many ways, namely:

(1) The fact that the income of the people in 1968 will be below the target set by the second NESD Plan means that government revenue will be less than estimated.

(2) For reasons of national security, the government has found it necessary to increase expenditures for national defense and the maintenance of law and order within the country. Such increased expenditures will reduce government savings which might be an obstacle to the economic development programs in the future.

(3) As the value of the Gross National Product for 1968, particularly in the agricultural sector will increase at a much lower rate than estimated, there will be economic and social problems as the result of the decreased income of the farmers in certain provinces, while there will be also an increase of unemployment in the country.

Thus, it will be necessary to follow and study closely the monetary and financial situation by assigning such tasks to the governmental bodies concerned, so that they can make a rapid assessment of the situation, both on the income and expenditure of the government, and suggest any measures necessary for the maintenance of the stability of the currency so as to enable the country's economic system to make sound progress.

CHAPTER TWO

GENERAL ECONOMIC SITUATION

During the 6-year period of Thailand's first National & Social Economic Development Plan 1961-1966, the economy of the country made very satisfactory progress which can be seen from the expansion and growth of overall production, foreign trade, industrial investments, as well as in the balance of international payments, price levels, and in the results achieved.

1. National Income.

National Income is an important factor in the measurement of the country's economic progress. The National Income of this 6-year period covered by the first NESD Plan shows a distinct economic expansion, particularly in 1966, the last year of the Plan, where the total GNP calculated on present value reached the amount of 91.3 billion Baht, which is a 63.9 percent increase over that of 1960. This is expected to reach about 99.1 billion Baht in 1967, or a 8.5 percent increase over that of the preceding year (1966). While the National Income for this 6-year period of the first NESD Plan increased at an average of 7.2 percent per annum, calculated on the current 1962 prices, the population growth during the same period has been increasing at a rate of 3.3 percent per annum, making an average increase of 4 percent per annum in per capita income.

It should be noted that the average income of rural inhabitants is generally lower than that of city-dwellers or residents of the Metropolis, for those in the first category are mostly farmers who make their living from agriculture which has a very low per capita income in comparison to industry, commerce and other services.

2. Capital Formation.

Primary gross capital formation for 1966, calculated on present value, is 20.2 billion Baht, which is more than double that of 1960, while it is expected that this will reach the amount of 22.4 billion Baht in 1967. During the first three years of the first NESD Plan, capital formation had been increasing at an average of 19.5 percent per annum, but during the last 3 years of this first NESD Plan, the rate of increase was reduced to an average of 9.2% per annum. One reason for this decreasing rate of capital formation during the last 3 years of the Plan may be attributed to the fact that there has been a great decrease in the rate of construction work during this period, as most important governmental construction projects were carried out during the first phase of the Plan.

3. Manpower

3.1 The present situation of manpower.

The main problems of manpower today are caused by (a), increasing unemployment because of the drought, particularly in the North East, and the slump in rubber prices which has shaken the economy of the South; and (b), by the shortage of manpower which could employ their vocational and technical knowledge to the best advantage. As a consequence, targets of various Projects in the Plan have not been achieved as planned.

Solutions of the unemployment problem in rural areas can be found by introducing measures which would employ more labor force and manpower, such as projects for the construction of provincial highways and road networks for the villages, or by irrigation projects. The problem of surplus manpower could be solved by the expansion of employ-

ment services to areas affected by the drought, or where there is seasonal unemployment. The problem of manpower shortage can, on the other hand, be solved by operations of educational projects, vocational training, and by training more skilled craftsmen. Besides, the Collaborating Committee between the Civil Service Office, the NEDB, and the Budget Bureau will have to consider in advance the manpower requirement of each different project to solve any problem over staff-allotment, and to study any means of inducement for work which is necessary to meet the manpower problem, as well as training and planned lectures for today's civil servants.

3.2 Tendency of Employment.

Works started in the various projects of different sectors during the first year of the Plan have raised the employment level as aimed. During the first half of 1967, about 1,290 businesses were either opened or developed, resulting in increased employment for 14,000 people. The Central Office of Employment Service in Bangkok had 8,000 vacancies on its books during this period, out of which 7,200 were registered on its unemployment list, and for 3,000 of which employment was found.

3.3 Labor Shortage.

Rapid expansion of economic activities both in governmental and private enterprises has resulted in a shortage of professional and technical manpower. A survey of the manpower situation shows that there is a shortage of engineers, work supervisors, mechanics, machinery-repairers, welders, and manual workers in private enterprises, while it is difficult to find, engineers, surveyors, agronomists, and vocational teachers to fill the positions available in governmental work. Many employers have reported low productivity as a result of absence, frequent changes of employment, lack of suitable training to meet the demands among employees graduated from vocational schools, as well as the different rates of pay and compensation between employees of governmental and private enterprises which have resulted in changes of employment for skilled and specialised workers causing agitation in labor stability and productive forces.

3.4 Increase of population and Labor force.

It is estimated that, based on the rapid population growth of 3.3% per annum, the population in 1968 will increase from 34.2 to 35.4 million. There is an evident necessity for the study of important related factors which have contributed to this high rate of population increase, as such study will be of use in introducing a suitable population policy. There will also be a coordination of work between various branches of organizations responsible for solving this population problem, on their study of effects of this population growth on the economic and social development of the country.

Because of this population growth, the labor force in 1968 will increase from 15.2 to 15.6 million people, and it is expected that the NESD Plan will be able to create enough employment to meet this increased labor force. The main problems, however, will remain those of productive capacity, and increased income for the agricultural labor force. A survey will be made on rural employment to get the facts and figures of the low-level of employment there, so that suitable policy and planning can be made for employment promotion, and the creation of high productively in the agricultural sector.

3.5 Development of Human Resources.

Work on the development of human resources will be met by the development of vocational education. At present, work on the projects under the IBRD Loan have been started to develop various vocational schools in the craft and agricultural fields, while preliminary steps have been taken in the improvement of craftmanship, training of work supervisors and new teachers by the Labor Department's Institute to Promote Technical Knowledge, which was set up last year, and which will be further aided by technical assistance from the United Nations. The Small Industry Promotion Institute established

recently by the Ministry of Industry will also play a part in this development work, through its projects to train enterpreneurs and workers of small industries. However, consideration has been given to the establishment of a vocational training project at the national level, to coordinate the various vocational training forces to achieve more effective results in the promotion of skilled labor.

3.6 Salary and Means of Inducement.

Means must be found to raise the productivity which is of great importance to industrial development in the 1968 fiscal year. Such increase of productivity will have to be worked out closely in relation to policies on salaries and work inducement. Even though development of salary structure is a necessary inducement for increasing productivity, measures must be taken at the same time to prevent any tendencies towards inflation.

Problems over salary and means of inducement for the Civil Servants will be worked out in detail by the Collaborating Committee composed of representatives of the Civil Service Office, the NEDB, and the Budget Bureau. A national Committee composed of employees, employers, as well as the governmental bodies concerned will be set up to study problems of general salary, particularly for unskilled labor so that suitable measures can be proposed to the government in accordance with the Cabinet decision for the solution of this problem. Other than these, there will also be development and improvement in the security of employment, industrial relations, labor marketing, and employment services to bring about greater all round efficiency.

The main manpower problems mentioned above will be jointly discussed in the committee of manpower advisors which will be composed of members from the various governmental bodies concerned, as well as those from private industry, so that policies and projects will be made to achieve the employment targets as set up by the NESD Plan.

4. Production.

4.1 Agriculture

Agriculture still is of prime importance in the national economy, even though the rate of distribution in agricultural income throughout the period of the first NESD Plan was reduced in comparison to the rates of industry and other activities. During this 6-year period of the NESD Plan, agricultural production increased at an average of 5 percent per annum compared to the 4 percent rate during the period before the first NESD Plan. This was the result of the government efforts to accelerate economic development in every field according to the NESD Plan, such as projects for irrigation, land development, agricultural research, improvement of breeding, fisheries, promotion of work and vocations, communication and transportation, as well as development of both domestic and foreign markets, all of which are important factors in the gradual increase of agricultural production each year.

4.1.(1) Rice. 9.2 million tons of rice were produced in the 1965-1966 season, which was a slight drop compared to the 10.03 million ton yields of 1963-1964, the highest rice production for years. Rice production has declined somewhat because of damage done by drought, natural causes and pests in certain rice-growing areas.

However, judging from the acceleration in various development projects such as projects for biannual planting assistance given to farmers on fertilizers, pest control, irrigation and extension of better seed rice cultivation, a gradual increase in the rice-production will be seen, particularly for the 1966-1967 season when up to 11.8 million tons of rice production is expected with an increase of average yield per rai. Rice production for the 1967-1968 season is nevertheless expected to be reduced to about 10 to 11 million tons because of the severe drought in 1967 which delayed rice cultivation, and caused serious damage in non-irrigated paddy fields.

4.1.(3) Rubber. During the 6-year phase of the First NESD Plan, there was no marked tendency for rubber production to increase. An average of only a 3.8% increase per year has been experienced. Most of the rubber plantations were established a long time ago, so the trees produce less and less rubber each year. Rubber planters have, however, been able to plant better rubber varieties, which are already producing good results. The average yield per rai of these better-grade rubber trees is about 3 to 4 times above that of the old plantations. Almost ten thousand rais were replanted with better-grade plants during 1961-1962, so that up to 225,000 tons can be expected from the rubber production of 1967, which is a slight increase over that of the preceding year (1966). There is a regular downward trend for rubber prices which has caused a marked reduction of income for the rubber planters. A long-term measure to solve this problem would be substantially to accelerate the rubber replanting schedule to obtain a higher productive capacity, while immediate problems must be solved through the promotion of diversified crops to supplement income while waiting for the new planting to come into production.

4.1.(4) Cassava. Tapioca-production is related somewhat to the prices of sugar, in that farmers usually turn to the cultivation of sugar-cane instead of cassava if sugar commanded a high price in the preceding year. Thus, tapioca-production fluctuated throughout the 6-year period of the NESD Plan. For instance, the production of 1963 soared to 2.1 million tons, which was almost double that of 1960, while 427.2 thousand tons to the value of 439 million Baht was exported that year. In 1964, the production was reduced to 1.5 million tons as farmers turned more to sugar-cane cultivation because of a high sugar price, even though both volume and value of exports were still on the increase. 1.7 million tons were produced in 1966, and about 1.5 million tons are estimated for 1967 production, while the volume of exports during later periods will increase at a slower rate on account of greater custom duties imposed by the European Common Market.

4.2 Forestry.

Only a slight increase of timber-production was seen during the 6-year period of the first NESD Plan. A gradual decline of teak-production was seen from 1960 on-wards, with an upward trend only during the last 2-3 years. 186,000 cubic meters of teak were produced in 1966, while the production of 1967 is expected to be reduced to only 157,000 cu.meters. There has been however, a slight increase of Yang and other timber production. Even though timber-production has increased each year, it has not been enough to meet the demands of domestic consumption, so it is expected, that the timber shortage will continue because forest development is progressing at a slow rate due to lack of manpower and financial support.

4.3 Fishery

The fishing industry has developed on a large scale, particularly the marine fishery, in which 550,000 tons of fish were caught in 1966, an amount 4 times that of 1960. The use of modern equipment and new techniques produced this increase, so it is expected that up to 604,000 tons will be produced in 1967. The fresh-water fishing industry has also been expanding, but at a somewhat slower rate, for about 83,000 tons were produced in 1966, and about 91,000 estimated for 1967. Once the government has introduced accelerating measures to promote the fresh-water fishing industry, it is expected that the production of this industry will be on the increase.

4.4 Livestock

Promotion of a better grade of breeding has been introduced for cattle, swine, and poultry by the establishment of breeding expansion centers in various districts, which were received with great enthusiasm by the breeders concerned. Several breeding development centers have been set up, while dairy cattle breeding, which was mostly in an experimental stage, has already been introduced for certain districts.

Animal disease control has been expanded on a larger scale, while the government has a project to develop certain suitable areas in the North-East as pasture lands, as well as to improve the marketing system so that greater production in this field will be seen in the future.

4.5 Industry

Within only the 6-year period of the First NESD Plan, industries both big and small have made rapid development. Various industries were founded, such as those for car assembly, manufacturing of automobile tires, paper, glass, mirrors, pharmaceutical products, and sweetened condensed milk, etc. Industries which were already in existence before the introduction of the NESD Plan, such as the production of coarse sacks, cement and plywood were greatly expanded at an average rate of 7.9% per annum within the first three years of the NESD Plan. An increase of 13.9% per annum was reached in the second half of the Plan. At the end of 1966, 40,953 factories were registered, which is a 155.8% increase over the rate of 1960.

Such expansion and growth of domestic industry is the result of the efforts of the Government to accelerate and promote private investment on a large scale through the establishment of the Board of Investment Promotion in 1959. Government industrial enterprises on the other hand have shown a downward trend, as it is the policy of the Government to allow private enterprises to take them over. This can be seen by the fact that in 1965 the government industrial enterprises constitued 16.3 percent of the total national industry. In 1967 they dropped to 15.2 percent.

Other widely expanded industries such as the manufacture of cement, gunny sacks, sugar, paper, cigarettes, clothing, plywood, batteries, matches, and pharmaceutical supplies do not have a high enough production to meet domestic demands. There was a cement shortage, even though 1.48 million tons of cement were produced in 1966, which is almost double the production in 1960. Once the cement plant at Tung-Song has been developed to its full capacity, and the cement plant at Ta-luang expanded, and the capacity doubled, there should be enough production to meet the demands of domestic consumption in later years.

46.8 million gunny-sacks were produced in 1966, while 52.0 million were expected in 1967, which would exceed the local demand. An exceptionally high production of sugar in the amount of 320,000 tons was obtained in 1965, while 269,000 tons were produced in 1967. Even though production in 1967 is less than in 1966, there is still a surplus of sugar on the market, as a great amount of sugar remained from the 1965 stock. Paper production has increased 4 times within this 6-year period, while more is expected, once the Kraft paper plant has been put into operation.

4.6 Mining

Another item of export bringing in hundreds of millions of Baht in revenue each year is the ore of various kinds of minerals, particularly tin ores. During the 6-year period of the First NESD Plan, production of various ores such as tin, wulfram, lead, manganese gypsum, and fluorite, has increased regularly. 31,000 tons of tin was produced in 1966, which is almost three times the quantity produced in 1960. More is expected for 1967 as the price of tin during early 1967 was still high, even though the price may decline slightly in later months on account of the discovery of new tin deposits, the more important of which were found by the exploration of offshore tin deposits.

750,000 tons of iron ore were produced in 1965, which is an increase of 115,000 tons over that produced in 1960. Production in 1965 was slightly lower, or 691,700 tons; production in 1967 is expected to be reduced further to 300,000 tons. 15,000 tons of lead were produced in 1966, which is almost three times the production of 1960, although the 1967 production will be reduced to about 3,600 tons. Production of other mineral ores, such as wulfram, fluorite, and lignite have increased slightly.

According to surveys carried out by the United Nations under the Lower Mekong Project, several ore-deposits which might prove of economic value have been discovered in the North-East. In addition to iron ore, copper deposits of low-grade quality have been discovered in great quantities. Surveys made by the Department of Mineral Resources show that there are more than 17 million tons of 0.7% copper ore.

Another valuable raw material is oil. At present, the oil refinery at Fang is the only refinery where crude domestic oil is refined. Concessions for oil surveys over an extensive area from the North-East right down to the Gulf of Siam were sought from the government in 1965, and it is felt that such survey concessions will be considered for 1968.

5. Price Level

Statistics of the Wholesale Price Index have been fluctuating throughout the 6-year period of the first NESD Plan. The 1966 Wholesale Price Index (1958 as base) rose rapidly, or 14.2% above 1965, while there is an average of 7% increase for the 1967 Wholesale Price Index. This is due to the price rise in agricultural and food supplies although it should be remarked that this Wholesale Price Index is undergoing a period of adjustment as both the types and importance of the various products used in this calculation were made many years ago, and may be outdated by now.

The Consumer Price Index, adjusted in 1962, increased slightly between 1960-1965, with an average rise of 1.5 percent per annum, for the overall index (with 1962 as base) and 2.1% per annum for the food index. There was a rapid increase of rate in 1966, or 3.8% higher in the overall index over that of 1965, and up 6.5% for the food index, compared to the 1.6%, 3.8%, and 1.4% increase over the index of 1965 for housing, personal and medical care, and recreation and education. The Consumer Price Index had an upward trend for the year 1967, with similar rate of increase over those of 1966 both for the overall and the food index.

6. Foreign Trade

There has been a gradual increase in both the volume and value of Thai foreign trade. The value of foreign trade for 1966 reached the amount of 32.8 billion Baht, of which 18.5 billion was accounted for by import value, and 14,3 billion by export (excluding military imports). A total increase of 14.6 billion Baht was achieved over 1960, or an increase of 80.2%, out of which there has been a 92.7% increase in the import value, and 66.3% in export. ~~Deficit~~ in the balance of trade therefore continues, and it is expected that the volume of foreign trade for 1967 will be somewhere around 36.0 billion Baht. Even though there was deficit in the Thai trade balance throughout the period of the First NESD Plan, the country's international balance of payments has always been on the credit side with a surplus every year because a great amount of foreign currency has been obtained by expenditures of foreigners within the country, as well as from foreign investments and foreign aid. Particularly, for 1966, the surplus in the balance of payments almost doubled that of the preceding year (1965), so that the country's gold and foreign exchange reserves at the end of 1966 reached the amount of 825.8 million American dollars which would meet the cost of 8 months' import. For 1967, to the end of September only, there was a reserve fund of 910.2 million American dollars.

Most of the country's imports are in the form of capital goods, such as machinery, equipment, labor-saving equipment, as the country is undergoing an economic development period according to the objectives of the NESD Plan. Major exports on the other hand, were rice, rubber tin, maize, jute, and tapioca products. The exports of rubber, jute and tapioca products for later years may face some problems such as the drastic rubber price slump, competition from other jute and tapioca producing countries, as well as the increased customs duties imposed by the European Common Market, so that the rate of growth is not expected to increase at the same pace as before.

7. Monetary, Banking and Fiscal Situation.

Since 1960, the amount of property and wealth held in private hands has been increasing at a reasonable rate, which has resulted in a stable growth in the country's economy. The large amount of foreign currencies which flowed into the country for the year 1966 went as high as 3,287.3 million Baht, so that wealth held in private hands at the end of 1966 was exceptionally high, or 16,658 million Baht, which is 2,326 million Baht more than that in 1965, or a 16.2% increase, in comparison to the 10.9% and 8.7% increase respectively for 1965, and 1964. Besides, the total sum of 17,349 million Baht at the end of October 1967 is a 691 million Baht, or 4% increase over the figure at the end of December, 1966.

Banking has also shown a rapid growth in both time and demand deposits, at the same time reduction of loans, deficit accounts as well as other discounts are seen which illustrate the wide expansion of investments, commercial activities as well as private industrial enterprises. Such development has enabled the objectives of the NESD Plan for production and other services in private sectors to achieve their goals.

Throughout the 6-year period of the NESD Plan, the government revenue has been on a steady increase, namely, 1966 revenue, or the last year of the first NESD Plan, totalled 15,238 million Baht, which is a 7,314 million Baht or a 92% increase over that of 1960. At the same time as this increasing revenue the government expenditure also went up as a result of its efforts to accelerate national development works towards the objectives laid down. The total government expenditure for 1966 was 14,600 million Baht, which is 7,000 million Baht or a 92% increase over that of 1960. The government set its target of 19,228 million Baht for 1967 expenditures (including the mid-year budget), out of which 14,488 million Baht would be derived from tax revenues and other income, with 4,740 million Baht obtained from domestic loans.

A Brief table of economic indicators

	1960	1963	1964	1966 (Beginning)	1967 (Approx.)
Population (million)	27.1	30.0	31.0	33.1	34.2
GNP at current prices (Baht million)	55,717	68,921	74,273	91,308	99,101
Per capita income at current prices (฿)	2,056	2,301	2,399	2,795	2,898
Capital formation at current prices (Baht million)	9,310	15,248	17,319	20,199	22,421

	1960	1963	1964	1966 (Beginning)	1967 (Approx.)
PRODUCTION					
Agriculture (000 tons)	6,770	9,279	10,029	9,218	11,846
Rice	544	858	935	1,200	1,000
Maize	171	198	211	220	225
Rubber	188	219	310	550	350
Kenaf/Jute	1,222	2,111	1,557	1,650	1,500
Tapioca	154	144	143	186	157
Teak (000 cubic metres)	321	462	537	535	445
Yang (000 cubic metres)					
FISHERIES (000 tons)					
Fresh water fish	73	95	83	83	91
Marine fish	147	323	494	550	604
INDUSTRY					
Cement (000 tons)	544	997	1,059	1,483 (Jan. Aug.)	1,142
Gunny bags (000 bags)	6,878	23,129	33,511	46,807 (Jan. - Sept.)	52,000
Paper (tons)	2,554	7,890	13,577	12,241 (Jan. - Sept.)	10,662
Sugar (000 tons)	140	125	168	269	232
Cigarettes (million units)	8,862	10,171	10,195	11,123 (Jan. - Sept.)	9,125
Cotton Textiles (million yards)	83	140	171	265	300
MINERALS (tons)					
Tin	16,757	21,617	21,635	31,300 (Jan. - Sept.)	22,632
Lignite	107,873	137,073	103,633	171,132 (Jan. - Aug.)	201,869
Iron	11,475	15,743	190,955	691,700 (Jan. - Sept.)	502,147
Gypsum	13,000	23,889	41,900	39,629 (Jan. - Sept.)	53,497
ENERGY PRODUCED (million KW/hour)	549	644	779	1,539	2,086
PRICES LEVELS					
Wholesale price index (1958 = 100)	92	99	93	110	115 (Nov.)
Consumer price index (1962 = 100)	96	101	103	108	114 (Nov.)

	1960	1963	1964	1966 (Begbiing)	1967 (Approx.)
FOREIGN TRADE (Baht million)					
Exports	8,614	9,676	12,339	14,310	14,497
Imports	9,622	12,803	14,253	18,504	21,500
Balance of payment	949	949	1,437	3,287	1,310 (Nov.)
FINANCE (Baht million)					
Revenue (F.Y.)	7,924	10,326	10,657	15,238	17,074
Expenditures (F.Y.)	7,599	10,504	11,030	14,599	18,672
Internal debts (end of December)	6,380	7,619	8,784	12,681	13,596 (Nov.)
External debts (end of December)	2,153	3,923	4,490	5,278	5,667 (Sept.)
MONEY AND BANKING (million Baht)					
Money supply held by people (end of Dec.)	10,088	11,881	12,919	16,658	17,349 (Oct.)
Total deposit at commercial banks (end of Dec.)	5,338	9,747	11,437	17,212	19,883 (Oct.)
INTERNATIONAL RESERVES	7,130	11,008	12,445	17,182	18,255 (Nov.)

CHAPTER THREE

ECONOMIC STRUCTURE AND OVERALL BALANCE

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1. Gross National Product

Estimation on the growth of value in the agricultural sector of the NESD Plan for 1968 is made on the assumption that one-sixth of the rice grown will be harvested within the same year of its cultivation while the remaining five-sixths will be harvested the following year, so as to obtain an ever more accurate comparison of the demand and supply of rice each year. As for the cultivation of other crops, most of them may be harvested in the same year as their cultivation, or carried out continuously several times during the same year, so that there is no time problem as in the case of rice.

1.1 1967 Situation

Table 3.1 shows that the GNP of 1967, calculated in constant 1965 prices will increase at the rate of 7% over that of 1966. This is a somewhat low rate of growth when compared to the average 8.5% rate set up as a target by the second NESD Plan for 1967-1971, or to the annual average of 8.1 percent effected during the last half of the first NESD Plan, 1963 - 1966. This is so because only a slight increase in additional value of the agricultural sector is expected, while the growth value of other sectors, such as mining and quarrying, electricity and water supply, as well as commerce, will also be increasing at a lower rate than that of the 1963-1966 period.

The following points should be noted when making comparisons of the additional growth value in the agricultural sector for 1967 and 1966: climatic conditions for the 1966 season were rather good, so that rice harvest in 1967 yielded about 6.4% more than rice production in 1966.

An exceptionally long drought, the longest during the last 16 years, was experienced during the 1967 growing season, so that cultivation of crops such as rice, maize, sorghum and jute was unusually delayed. Serious damage was sustained, particularly in non-irrigated areas, and new crops had to be re-sown where these had been damaged by drought and pests, even though such measures have not as yet shown full results. Moreover, foreign market demand for certain agricultural products such as tapioca and jute tended to decline, so that domestic prices have been lower. For all these reasons, coupled with the fact that merchants are reluctant to provided farmers with loans for their work-investment, the volume of agricultural products including part of the rice harvest in 1967 could not be said to have increased very greatly over that of the preceding year (1966).

The value of the fishing, livestock, and forestry sectors is expected to increase in 1967 at a similar rate to that of 1966. The value of the Agricultural sector, on the other hand, will only have a 2% increase over that of 1966 as the low increase of cultivation, for reasons discussed above, covers two-thirds of the entire Agricultural sector.

Mining and quarrying values are expected to increase at a rate of 3 percent in 1967, which is lower than the rate of 1963-1966, and below the targets of the second NESD Plan, because tin mining, which covers about 60% of this sector's production, will increase at a rate of only 4 percent in 1967, compared to the 18% increase in 1966, the year when a very high price for tin ore prevailed.

Industrial value is expected to increase at a rate of 10 percent in 1967, which is close to the target of the second NESD Plan. Rapidly expanding industries will range from food production, textiles, wood production, printing business, oil refining and iron-smelting, to battery production, while the construction sector will rapidly expand at the

rate of 11% per annum, as the result of expenditures made in the government economic development projects, and in joint programs initiated by the Thai and foreign governments.

Value of the electricity and water-supply sector is expected to increase at the rate of 20% in 1967, which is below that of the 1963-1966 growth rate but above the targets of the NESD Plan. This is so because projects are now in hand for the improvement of electricity production to meet the rapidly increasing demands in the country.

The value of the Transportation-Communication sector will increase at the 11% rate, in accordance with targets set up by the NESD Plan as results of the modernization and improvement in the communication-transport systems, as well as the expansion of the overall economic activities.

Value in the Commercial sector is expected to increase at the rate of 8% for 1967, which is a rate close to the target of the NESD Plan. Value of the banking, insurance and real estate sectors is expected to grow at a rate of 15.6% in 1967, which is higher than the growth rate of this sector during the 1963-1966 period, even though it falls below the 17.0% target of the NESD Plan.

The increasing value of the housing sector is expected to grow at the rate of 4.3%, which is also the rate of expansion of this sector for 1967. The increase of value in the administrative and defense sectors is expected to be about 10% in 1967 as the consequence of a rapid increase in the government general administrative expenditures, even though this still falls short of the 12% rate established as the target in the NESD Plan.

A 9.7% increase in 1967 is estimated for the value of the Services sector, a rate near the NESD Plan target, as tourism and other services should continue to expand rapidly.

1.2 1968 Situation

It can be estimated that the increase in the 1968 Gross Domestic Product will be only 6% over the total 1967 figure --- a rather low rate compared to previous periods. This is because of the shortage of rain during the 1967 cultivation season, mentioned previously, resulting in a yield of approximately 10 - 11 million tons, the major portion of which will be harvested in 1968. The entire rice production in 1968 will be about 7% below that of 1967.

It is estimated that the cultivation of other crops such as maize and cotton will be able to show better results than 1967's low rates, which should thus make up the decrease of rice production, so as to make the value of the Agricultural sector for 1968 only slightly lower than that of 1967.

Once the expansion of the Fishing, Livestock, and Forestry sectors has been taken into consideration, it is estimated that the entire value of the Agricultural sector for 1968 will be about 0.6% more than that of the preceding year.

TABLE 3.1

Estimated GDP at 1966 Prices

Sector	1966		1967		1968		Average growth rate per year	
	GDP (฿ million)	%	GDP (฿ million)	%	GDP (฿ million)	%	1967	1968
1. Agriculture	28,368.8	32.1	29,004.8	30.6	29,189.4	29.1	2.2	0.6
2. Mining and Quarrying	2,112.9	2.4	2,177.8	2.3	2,280.8	2.3	3.1	4.7
3. Industry	10,972.9	12.4	12,070.2	12.7	13,096.2	13.0	10.0	8.5
4. Construction	4,520.8	5.1	5,018.1	5.3	5,419.5	5.4	11.0	8.0
5. Electricity and Water Supply	885.9	1.0	1,064.0	1.1	1,256.6	1.2	20.1	18.1
6. Transportation & Communication	6,356.0	7.2	7,048.8	7.4	7,669.1	7.6	10.9	8.8
7. Commerce	16,811.4	19.0	18,163.7	19.2	19,154.7	19.1	8.0	5.5
8. Banking, insurance and real estate	3,006.5	3.4	3,476.9	3.7	3,890.6	3.9	15.6	11.9
9. Dwelling	3,613.8	4.1	3,769.1	4.0	3,893.5	3.9	4.3	3.3
10. Public Administration and Defense	3,973.0	4.5	4,378.0	4.6	5,175.0	5.2	10.2	18.2
11. Services	7,794.3	8.8	8,548.6	9.0	9,377.8	9.3	9.7	9.7
12. Gross Domestic Product	88,416.3	100.0	94,720.0	100.0	100,403.2	100.0	7.1	6.0

TABLE 3.2

Overall Economic Balance
(Calculated on each year's current prices)

Items	1966		1967		1968		Average growth rate per year	
	฿ million	% of GDP	฿ million	% of GDP	฿ million	% of GDP	1967	1968
1. Private Consumption Expenditure	61,711.0	67.6	67,385.7	68.0	72,738.1	68.6	9.2	7.9
2. Government Administration Expenditure	9,759.5	10.7	11,085.0	11.2	12,701.0	12.0	13.6	14.6
3. Capital Formation	20,198.8	22.1	22,420.7	22.6	25,099.4	23.7	11.0	11.9
(1) Government sector	5,446.0	6.0	6,146.0	6.2	7,113.0	6.7	12.8	15.7
(2) Private sector	14,752.8	16.0	16,274.7	16.4	17,986.4	17.0	10.3	10.5
4. Goods and Service Exported[1/]	19,340.0	21.2	21,090.0	21.3	19,230.0	18.1	9.0	-8.8
5. Less Goods and Services Imported[1/]	19,701.0	21.6	22,880.0	23.1	23,730.0	22.4	16.1	3.7
6. Gross Domestic Product	91,308.3	100.0	99,101.4	100.0	106,038.5	100.0	8.5	7.0

[1/] Exclude investment incomes.

TABLE 3.3

Growth Rate Comparison
(by Economic Sectors)

Sector	Actual rate during 1963 - 1966	Average annual growth rate at constant prices		
		2nd Plan target rate	Newly estimated rate for 1967	Newly estimated rate for 1968
1. Agriculture	4.6	4.3	2.2	0.6
2. Mining & Quarrying	12.6	6.6	3.1	4.7
3. Industry	13.2	10.9	10.0	8.5
4. Construction	7.1	11.4	11.0	8.0
5. Electricity & Water Supply	26.7	18.0	20.0	18.1
6. Transportation & Communication	10.9	11.0	10.9	8.8
7. Commerce	9.4	8.4	8.0	5.5
8. Banking, Insurance & Real Estate	11.9	17.0	15.6	11.9
9. Dwelling	4.3	5.0	4.3	3.3
10. Public Administration & Defense	6.4	12.0	10.2	18.2
11. Services	7.3	9.5	9.7	9.7
12. Gross Domestic Product	8.1	8.5	7.1	6.0

Such decrease in agricultural value would affect the rate of increasing value in other branches as well as the Industrial, Communication-Transport, Commercial, and Banking sectors. Industrial value is expected to increase at a rate of 8.5% in 1968 as the value of the rice milling industry, which covers 18% of the entire industrial sector, will be reduced in proportion to reduced rice-production. Commercial value will probably increase at a rate of only 5.5% because of the proportional drop in the trade of agricultural products due to less agricultural production while Transportation-Communication, and banking businesses are expected to increase at the rate of 8.8% and 11.9% respectively.

Expansion of other sectors is expected in 1968 on rates close to those obtained in 1967, except for the mining and quarrying sectors, as well as the administrative and defense sectors, where quicker expansion rates are expected.

It is to be noted, however, that if the rice production of 1967 gives a much better yield than that originally estimated, the Gross National Product of 1968 will exceed the estimated 6.0 percentage.

1.3 Comparison of Sectorial Economic Growth Rates

Table 3.3 gives the comparison of sectorial economic growth rates during the last 3 years' of the first NESD Plan, the period of the second NESD Plan, and in 1967 and 1968.

It can be seen that the slight agricultural increase of 1968 is holding down the rate of increase in other sectors so that the GDP of that year does not reach the targets established in the second NESD Plan. The new estimated GDP (in 1965 prices) for 1968 is 100,403 million Baht, or about 2% lower than the rate originally established by the second NESD Plan. If economic development is to reach the former targets established for 1971, which is approximately 130,814 million Baht, the average annual growth rate for 1969-1971 will have to be 9.3% instead of 8.5% as originally established in the second NESD Plan.

2. Economic Structure

Economic structural changes for 1967 and 1968 will continue with the same trends as past years, in that the ratio of the agricultural sector in the GDP figure will be reduced from 32.1% in 1966 to about 30.6% and 29.1% in 1967 and 1968, respectively. Almost all other sectors will be of more import, particularly industry, construction, electricity and water-works, communication transportation, banking, insurance, and real estate.

The decreasing ratio of the agricultural sector in comparison to other sectors can be considered as normal in the course of economic development and adjustment of balance in the production framework, only when and if agricultural production expands at a sufficiently rapid rate to meet the increasing demands of domestic consumption created by the growth of population and income, as well as having enough surplus for export, so as to maintain a satisfactory balance of trade for the country.

But this is not the case for the decreasing ratio of the agricultural sector in 1967 and 1968, as agricultural value during these 2 years has been increasing at a lower rate than that of population, so that the increasing production has not been able to meet the increased demands created not only by the growth of population, but also by the rise of incomes. For these reasons, prices for almost every kind of agricultural product, and particularly food, have increased rapidly, as illustrated by the 1966 Consumer Price Index, which shows an increase of 3.8 in the Overall Price Index, but up to 7.2% increase for food. Other than this, there has been no increase of the surplus of agricultural products meant for foreign markets, so that if the present high demands in foreign markets continue, more pressure will be felt on the domestic price rise.

3. Capital Formation

The entire capital formation is composed of fixed capital and changes in stock values. Fixed capital formation is mainly made up of imported capital goods, construction and other capital goods produced in the country. About 11% and 12% increases are expected in the total capital formation for 1967 and 1968 respectively, to the value of 22,421 million Baht for the former, and 25,099 million Baht for the latter (see Table 3.2).

The increase of government capital formation of 12.8% for 1967, and 15.7% in 1968, is more than that of private sectors, which is 10.3% and 10.5% respectively for 1967 and 1968. Because of the huge sum of the infra-structure type of investments made in the government economic development programs for agriculture (irrigation), communications and transport, and power, the government capital formation ratio therefore shows an increase from 26.9% in 1966 to 28.3% in 1968. Capital formation in the private sector is expected to increase at the rate of 10.3% per year, while the ratio of the GDP will be increased from that of 16.1% in 1966 to about 17% in 1968 at the same time government capital formation will increase from the GDP of 6% in 1966 to 6.7% in 1968.

It can be seen therefore, that the capital formation-GDP ratio for 1967-1968 has increased about 23%, which is the ratio estimated in the second NESD Plan. Marginal Capital-Output Ratios for 1967 and 1968 on the other hand are estimated at 2.6:1 and 3.2:1 respectively in comparision to the 2.75:1 estimated in the increase rate of 1968 on the assumption that production in various sectors will be growing at a slower rate in 1968.

4. Overall Economic Balance

Table 3.2 shows the overall economic balance for 1966-1968, in which it can be seen, that the general administrative expenditure of the government has been increased to 13.6% in 1967 and to 14.6% in 1968. The ratio of this expenditure to the GDP will be increased from 10.7% in 1966 to about 12% in 1968 because of the great increase of government administrative expenditures including those on economic and social administration, defense and maintenance of law and order in the country.

Private sector expenditures are expected to increase by about 9.2% in 1967, and 7.9% in 1968. Once 3.8% of the food price rise has been subtracted, the growth rate at constant prices will be only 5.4% and 4.1% respectively, which is below the 7.6% target of the second NESD Plan. If population growth continues at the rate of 3.3% per annum, consumption expenditure per capita at constant prices will only increase at about 2% in 1967, and not even 1% in 1968.

Export of goods and services shown in the table for the overall economic balance (3.2) includes the revenue obtained from expenditures by foreign governments and troops in Thailand, which rapidly increased in 1966 and 1967. Goods exported alone increased at the rate of 6.4% in 1967, but once both goods and services exported (except investment incomes) are included, this increase rate is raised to 9.0%, which is higher than the 7.2% annual target of the second NESD Plan. Goods and services exported in 1968, however, are estimated to be about 8% below that of 1967 as the consequence of low amount of rice export resulting from 1968 low rice production, which necessitates the retention of a great quantity of rice for domestic consumption. Decreasing export values are also expected for other items, such as tin, maize, and jute, as the result of the decreasing price in world markets. Other than these, not much rate of increase is expected either for incomes of other services, as has been experienced in the past.

As far as goods and services imported are concerned, (excluding the transfer payment of dividends, profits, and interest of branches of foreign companies), about 16% of growth was seen during 1967, which is above the annual 9.3% estimated in the second NESD Plan, as the results of huge imports of capital and consumer goods. Value of goods and services imported are expected to drop to about 3.7% in 1968, as the consequences of a low rate of growth in the National Income.

The deficit in the balance of trade will be accentuated more and more in 1967 and 1968, even though income from foreign investments, foreign loans and foreign aid is still high. This deficit of balance of trade could not be completely compensated, so that a slight decrease in International Reserve Funds are expected for 1968.

CHAPTER FOUR

PUBLIC FINANCE

It is estimated that the general monetary and fiscal situation for the 1967 fiscal year will be somewhat similar to that of the preceding year (1966), in that the increase of money supply will be made at a higher rate than that of the National Income, although it is estimated that less foreign currency will flow into the Thai economic system this year. The fiscal operation will retain the same characteristics in that there will be a great deal less deficit in government actual expenditures than that estimated in the budget. Money supply will therefore increase at a lower rate than that of the preceding year, which went as high as 16 percent. Such low increase of the money supply will reduce somewhat the pressures on commodity prices, which can be seen from the Consumer Price Index in which commodity prices in July 1967 increased by a 2.3 percent over that of the September 1966 prices, compared to the 3.4% increase of the same period during the preceding fiscal year.

1. Public Sector Finance in Fiscal Year 1967.

1.1 Budget Situation

For the fiscal year 1967, the government has set up an expenditure budget of 18,928 million Baht, while the income from taxes and other revenue should be about 14,188 million Baht. There is a gross deficit of 4,740 million Baht therefore (primary budget deficit), which will be met by government loans effected from domestic sources. However, on study of expenditure and income of the Treasury during the past 12 months of the 1967 fiscal year, actual government expenditure within that budget was only 18,397 million Baht approximately, and once this amount has been calculated together with the estimated actual revenue of 14,596 million Baht the gross budget deficit therefore was somewhere around 3,798 million Baht.

1.2 Government Finance. Other than the 18,928 million Baht expenditure allotted by the national budget, the second NESD Plan has set the following expenditure for the 1967 fiscal year. 1,520 million Baht to be met by foreign loans, 1,030 million Baht to be met by foreign aid, with another 1,520 million Baht to be met by incomes of state enterprises and provincial administrative bodies. Once the total sum of these expenditures to be met by various sources has been compiled, the government expenditure will total approximately 22,998 million Baht of which 9,837 million Baht is allotted to the social and economic development budget, with the remaining 13,161 million Baht for the general administration budget.

1.3 Economic and Social Development Budget.

Of 9,837 million Baht budget for social and economic development work, about 8,098 million Baht or 82% is expected to be the actual expenditure, out of which 5,190 million Baht will be met by the budget itself, 800 million Baht by foreign loans, and 808 million Baht by foreign aid, with about 1,300 million Baht by income of state enterprises, and other local administrative bodies.

2. Monetary and Fiscal Plan of 1968 Fiscal Year

2.1 Government Fiscal Plan. It is estimated that the total expenditure of the government during the 1968 fiscal year will be around 25,577 million Baht out of which 20,950 million Baht will be met by the Government budget, 1,934 million Baht by foreign loans, 810 million Baht by foreign aid, and 1,883 million Baht by revenue of state enter-

prises and local administrative bodies. Once this total amount is compared to the 26,015 million Baht estimated as the government expenditure for 1968 by the second NESD Plan, it can be seen that this is about 440 million Baht below the NESD Plan estimates.

2.2 General Administration Budget. Even though the general administration budget of 1968 is quite close to the Plan estimate of over 12,000 million Baht, there are, however, slight differences in the amount of expenditure for certain matters, such as national defense, salary increases, (which are higher than those estimated in the NESD Plan). Certain expenditures however such as debt payment, economic and social services have dropped somewhat from the NESD Plan estimate. This serves to illustrate the changes in the political and economic situation over the past period.

2.3 Economic and Social Development Budget. There is some change in the definition of the economic and social development budget, in that the budget for educational, public health, social, and public utilities development, as show in Table 1, is the total amount allotted to the entire group of projects instead of being the budget calculated on increased amount as has usually been the practice. This is to allow more efficiency in the budget-estimation, as well as to quicken and facilitate the cooperation of various governmental bodies concerned, more than has been experienced in the past.

Government expenditure for economic and social development work is expected to be about 13,471 million Baht for the fiscal year of 1968. 8,844 million Baht will be met by the Government budget, 1,934 million Baht by foreign loans, 810 million Baht by foreign aid, and 1,883 million Baht by income of state enterprises and local administrative bodies. This can be compared to the budget estimated by the NESD Plan as follows:

Table 4.1

Revised Development Expenditures for 1968 as compared with 2nd NESD Plan Estimate

Sector	National Budget		Foreign Loans		Foreign Grants		State Enterprises & Local Administration Agencies Income		Total	
	2nd Plan	1968	2nd Plan	1968	2nd Plan	1968	2nd Plan	1968	2nd Plan	1968
1. Agri. & Cooperatives	1,624.22	1,660.00	301.20	303.00	110.00	95.00	42.20	42.20	2,077.62	2,100.20
2. Industry & Mining	133.90	130.00	-	-	25.00	18.00	195.20	195.20	354.10	343.20
3. Communication & Transportation	2,060.21	1,780.00*	1,011.97	906.90	235.00	57.00	456.00	902.70	3,763.18	3,646.60
4. Power	397.60	350.00	380.55	443.40	65.00	82.00	262.00	362.40	1,105.15	1,237.80
5. Commerce	38.50	4.00	-	-	-	-	0.50	0.50	39.00	4.50
6. Social & Public utilities	1,045.55	870.00	221.00	221.00	320.00	279.00	380.00	380.00	1,946.55	1,750.00
7. Public Health	504.43	520.00	-	-	140.00	100.00	-	-	644.43	620.00
8. Education	2,993.53	2,860.00	157.00	60.20	100.00	104.00	-	-	3,250.53	3,024.20
9. Central Budget **	575.00	670.00	-	-	50.00	75.00***	-	-	625.00	745.00
Total	9,352.94	8,844.00	2,071.72	1,934.50	1,045.00	810.00	1,335.90	1,883.00	13,805.56	13,471.50

* Excluding highway projects which are financed by foreign loans and expenditure of General Post Office which are financed by self-earn incomes.

** Central Budget: Regional Development, ARD Remote area development, Specific area development, counterpart funds.

*** Foreign non-project grant.

Figures of education, public health, social and public utilities development budgets are revised to the new definition by adding up the FY 1968 development budget and the expenditure of original work (old figures on salaries + old figures on former project expenditures.)

It can be seen from the above Table that expenditure for development projects for 1968 amounted to 13,471 million Baht which is about 335 million Baht below the estimated budget of the NESD Plan. This difference is caused mainly by adjustments of projects included in the budgets of communication-transportation, social and public utilities, and education, namely, projects for highway construction, subsidies for local administrative bodies, development of vocational and comprehensive secondary education etc.

Most of the budgets for other development projects on the other hand, come quite near to the amount set by the NESD Plan, except for those in the Power Sector, where several new projects have been started such as the Project for a distribution line between Ang Thong - Korat, installation of a gas-turbine electricity generator at Nakhon Ratchasima. Therefore there is 130 million Baht more in the 1968 Budget than was estimated by the NESD Plan.

3. Appropriation of Funds for Economic Development Expenditure for Fiscal Year 1968

Of the above mentioned 13,471 million Baht allotted to economic and social development work, 10,731 million Baht could be attributed to domestic sources, and 1,758 million Baht to foreign sources (including foreign exchange and loans from the Bank of Thailand), which come to about 79% and 21% respectively of the development expenditure.

TABLE 4.2

APPROPRIATION OF FUNDS

FOR ECONOMIC DEVELOPMENT EXPENDITURES

FISCAL YEAR 1968

	(million Baht)
Development Expenditure	13,471
A. Domestic Sources	
Income from taxation and other	4,130
Loans from commercial banks, saving bank and the public	1,300
Loan from Bank of Thailand	1,500
Treasury	1,914
Income of State enterprises & local administration agencies	1,883
Total Domestic Sources	10,727
B. Foreign Sources	
Foreign loans	1,934
Foreign grants	810
Total Foreign Sources	2,744
Grand Total	13,471

4. Taxes and other sources of government revenue.

Government income from taxation and other sources for the fiscal year of 1967 are estimated to total around 14,596 million Baht, while about 16,236 million Baht or 1,640 million Baht (11.2%) increase is expected for the 1968 Fiscal Year. Once the general administrative expenditure of 12,106 million Baht has been subtracted from this sum, 4,130 million Baht is left for economic and social development works which is 30.7 percent of the total development budget.

TABLE 4.3

INCOME FROM TAXATION AND OTHER SOURCES

FOR FY 1968 ECONOMIC & SOCIAL DEVELOPMENT

		(million Baht)
	Income from Taxation	14,841.5
	Sales of Goods and Services	325.7
	State Enterprises	531.9
	Others	536.9[1/]
	Total	16,236.0
Less	General Administration Expenditure	12,106.0
Equal	Economic and Social Development Expenditure met by revenue from taxation and other state incomes	4,130.0

1/ Excluding loan repayments from highway projects.

5. Foreign Loans.

The foreign debt situation during the 9-months period of the FY 1967 (October - June) has shown foreign loans both directly made or guaranteed by the government of a total of 636.25 million Baht, while the total of 784.44 million Baht of loans is expected to be made by the end of the 1967 fiscal year, or about 51.5% of the 1,522.48 million Baht estimated by the second NESD Plan for 1967 foreign loans. Main causes for such difference in the actual drawings of loans and the estimated amount are the delays over negotiations and administration of certain large foreign-loaned projects, as well as difficulties and problems faced in the procedures of bids for the selection of companies to work on the projects. By the end of the 1967 fiscal year, about 415.10 million Baht of this foreign loans is expected to be paid back.

Once both new loans and repayment of foreign debts have been studied, one can see that only 189.32 million Baht in new loans have been made with foreign countries (excluding interest), during the first 9 months of the 1967 fiscal year, which is a small amount compared to the country's capacity to repay the total debt incurred.

As to the foreign debt situation of 1968, it can be expected that various problems such as the mutual loans of the IBRD and the Bank of Thailand, delays over bids in the

selection of representative companies as well as the immature stages of the projects could be reduced or even completely solved, while it is expected that loan negotiations with interested countries other than the IBRD and the former loan sources could be effected quickly. It could be accepted that withdrawals of foreign loans for the various projects for the fiscal year 1968 would be increased from the 1967, 784 million Baht to 1,550 million, or about three-quarters of the 2,070 million estimated for 1968 by the second NESD Plan. At the same time, about 730 million Baht of these foreign loans is expected to be repaid.

TABLE 4.4

FOREIGN LOANS BY SECTORS

(million baht)

Sector	FY 1967	FY 1968
Agriculture & Cooperatives	175.60	303.00
Communication & Transportation	397.54	906.89
Power	184.69	443.40
Industry & Mining[1/]	26.61	-
Community Development & Public Utilities	-	221.00
Education[2/]	-	60.20
Total	784.44	1,934.49
Actual Loan Drawing Estimated[3/]	-	1,547.59

[1/] Not shown in the second Plan, but money drawing still exists (IFCT)

[2/] Exclude Bank of Thailand loans

[3/] Subtract 20% of loans not disbursed

6. Foreign Aid.

About 731.31 million Baht were received in foreign aid in 1967. The United States contributed the most that year, giving about 79% of the total foreign aid Thailand received. About 41% of the aid was concentrated on community and rural development and development work on public utilities, with 15.78% on public health, 13,45% on agriculture and cooperatives and 11.89% for educational development. Other than these, aid on communication-transportation, power, industry and mining rank respectively in priority.

About 735 million Baht is expected in foreign aid during 1968, with the United States still the major contributing country, accounting for about 77% of the entire aid. Approximately 37.9% of the foreign aid expected for 1968 will be used for rural and community development and for public utilities development, while approximately 12.9%, 14.1% and 13.6% will be used for agriculture and cooperatives development, educational, and public health development respectively. The rest will be used for development of energy, communication-transportation, industry and mining.

The above-mentioned aid is only in the form of project-aid and does not include other aid in the form of educational grants, and the assistance of foreign experts, which come to about 75 million Baht each year for 1967 and 1968. Thus, counting both project and non-project aid given in 1967 and 1968, about 800 million Baht have been received each year, which is about 200 million Baht per annum below the estimated amount of foreign aid given in the second NESD Plan. This is so, because projects initiated by foreign aid 3-4 years ago are nearing completion, while preparations of new projects to obtain foreign aid are somewhat behind schedule, so that the amount of foreign aid given for 1967 and 1968 falls below that of the figure estimated by the second NESD Plan. However, if all goes well with the grant of the foreign aid requested, it is possible that the total amount of foreign aid given during the latter half of the second NESD Plan (or 1969-1971) could exceed the total estimates of the NESD Plan.

TABLE 4.5

FOREIGN GRANTS BY SECTORS

(1967 - 1968)

(million baht)

Sector	1967	1968
Agriculture	98.38	95.00
Industry	17.63	18.00
Communication	58.94	57.00
Power	53.88	82.00
Social & Public Utilities Development[1/]	300.06	279.00
Public Health	115.46	100.00
Education	86.96	104.00
Total	731.31	735.00

1/ include ARD assistance projects

TABLE 4.6

FOREIGN GRANTS BY SOURCES[1/]

(EXCLUDING SECURITY PROGRAM)

(1967 - 1968)

(million baht)

Donor	1967	1968
United States	576.76	570.00
United Nations	55.23	55.00
Colombo Plan	73.00	60.00
Other Countries	26.32	50.00
Total	731.31	735.00

1/ on expenditures basis.

7. Balance of Payments.

The country's balance of payment in 1967 was still on the surplus side as was the case in past years. International Reserves are expected to increase by only 1,300 million Baht at the end of 1967, which is less than the 3,287 million Baht increase of 1966. One of the main reasons the 1967 International Reserve Fund has increased at a slower rate than that of the preceding year is because the expanding value of 1967 exports (excluding services value) has been reduced from 10.9% in 1966 to about 2.8% in 1967. Only about 1.45 million tons of rice, which is the country's major export, is expected to be sent to foreign markets this year, at the same time that the value of other main exports such as tin, rubber and jute have shown a regular downward trend as the consequence of the world price slump.

The increasing value of imports is expected to be reduced from 19.9% in 1966 to about 16.4% in 1968, while the majority of this year's imports will be composed mostly of capital goods, at the same time that a downward trend for food commodities value is also expected.

With regard to the above situation of the country's foreign trade in 1967, it is estimated that Thailand will have to face a deficit in her trade balance to the amount of 7,100 million Baht or 2,600 million Baht more than the amount last year. Once the net income of other services and foreign donations of 6,520 million Baht have been subtracted, there will be a trade deficit of 580 million Baht. This is in consequence of the large revenue of the services sector which is mostly obtained by expenditure of foreign governments in Thailand, and the revenue of the tourist industry which has increased above the level estimated by the second NESD Plan. Once foreign investments in both public and private sectors have been added, the balance of payments will be maintained at approximately a 1,280 million Baht surplus.

Exports in 1968, on the other hand, are expected to have a downward trend at the rate of 8% as a result of the severe climatic conditions in 1967 which lowered the

total national product, particularly in rice production, so that the volume of rice exported in 1968 will be less than that of the preceding year.

1968 imports, however, are expected to show a 3.7% increase over the value of 1967. One could therefore conclude on such figures that Thailand's foreign trade will have to face a trade deficit of 9,300 million Baht in 1968, but taking into consideration the donations, services income, and net capital inflow,the country's Reserve Fund will be reduced by some 740 million Baht.

TABLE 4.7

BALANCE OF PAYMENTS

(1966 - 1968)

(million baht)

	1966	1967	1968
1. Goods			
1.1 Exports	13,817	14,200	12,700
1.2 Imports	18,297	21,300	22,050
Balance	-4,480	-7,100	-9,350
2. Services			
2.1 Income	6,198	7,690	7,380
2.2 Expenditures	2,091	2,380	2,540
Balance	4,107	5,310	4,840
Balance of good and services	-373	-1,790	-4,510
3. Donations (Net)			
3.1 Private Sector	216	210	220
3.2 Public Sector	810	1,000	1,000
Total	1,026	1,210	1,220
4. Capital (Net)			
4.1 Private Sector	1,319	1,400	1,600
4.2 Public Sector	63	277	953
Total	1,382	1,677	2,553
5. Net discrepancies	1,252	183	-
6. Balance of payments	3,287	1,280	737

(+ Increased reserve funds, - decreased)

8. Summary of Monetary and Fiscal Situation for FY 1968.

8.1 It is estimated that the rate of increase of agricultural production for 1968 will be lower than that of 1967 because of the drought and dry conditions in the country. This is one of the main reasons for the lower rate of exports in 1968 in comparison to that of the preceding year so that in spite of Thailand's intake of foreign currency from the tourist industry and from the lavish spending of American soldiers, there is nevertheless a deficit still in Thailand's balance of payments in the amount of 737 million Baht which is the first deficit during the past 8 years.

8.2 Furthermore, the low increase of agricultural production will have its effect on the economic system in the following ways:

8.2 (1) Government revenue from Taxation and income from other sources will increase at a lower rate than formerly estimated.

8.2 (2) Price pressure on agricultural products will be maintained at a high level.

8.2 (3) Economic and social problems created as the consequence of farmers' low income in certain provinces.

8.3 With regards to government financial condition, it is estimated that the government will have a part of the budget of which it could not make immediate withdrawal in time for expenditure in 1968, so that the actual government expenditure for 1968 is expected to be less than that already estimated in the National Budget. Furthermore, even though the government's actual expenditure may be already below that of the estimated amount, the deficit side of the government financial situation will be somewhat higher than the preceding year as the result of the increased government expenditures, such as the salary increase for civil servants, the cost of maintaining peace and order within the country, and the cost of defense etc. Once the actual deficit and other factors are taken into account, a 9.2 rate of increase of the money supply will be seen, which is not a very high rate when compared to the GNP growth rate of 6 percent. However, the government is introducing the following measures to solve various problems created by the dry conditions, and to introduce long-term measures to encourage domestic saving and domestic investment as follow:

8.3 (1) To acclerate various types of investment, particularly those which demand a higher rate of manpower than that of machinery so as to help out people in areas worst hit by the problems of the agricultural-decline.

8.3 (2) To stabilize the price level in food commodities and prevent its rapid rise, through the reduction of export volume and introduction of any reasonable and necessary customs measures.

8.3 (3) To promote public saving, particularly in the reduction of unnecessary government expenditures and imposition of more custom duties on luxury products, which would reduce unnecessary expenditure in the private sector.

8.3 (4) To promote long-term deposits, as well as to promote investments of high value to the economic development of the country.

CHAPTER FIVE

ECONOMIC DEVELOPMENT PROJECTS

Economic development projects laid down by the second NESD Plan are concerned with works in 4 major public sectors, namely agriculture and co-operatives; industry and commerce; communication and transportation; and power, while there are also economic development programs for the private sector.

Agriculture and Cooperatives

Irrigation development projects for 1967 cover construction of 13 state irrigation projects over an irrigated area of approximately 2.5 million rais. This include irrigational projects for Me Yom, Me Tang, Kew Lom, in the North; Lam Pao, Lam Pra Plerng, Lam Takong, and Nam Pong in the North-East; Me Klong Yai, and Kang Krachan in the Central Plains, and Ta Chiat in the South which are all continuing projects from the first NESD Plan. New works started in 1967, however, are only in the preparatory stage at the Oon and Pran projects. Construction of diversion and storage dams have been completed at Me Yom, Me Tang, Nam Pong, and Kang Krachan, while construction works on the earth-storage dam at Lam Takong have been 80% completed, with water distribution started last July. About 70% of preliminary works for the construction of the Phasom Dam at Uttaradit in the Nan Project has been completed, and a loan signed with IBRD, so that now preparations are being made to receive bids for its dam construction, which should be all settled by 1967.

Projects for general irrigation works include plans for the construction of 15 weirs over an irrigated area of 1.2 million rais, five of which are new projects introduced by the second NESD Plan, and three of which were completed in 1967 at Samoon, Nam Rid and Pasack. Construction of four reservoirs are underway in the North-East, one of which, at Lam Sam Lai, in Nakhon Ratchasima should be completed by 1967. 75% of the ditches and dikes in the Greater Chao Phraya Project have been completed, and now cover an area of 3.8 million rais, while the Petchaburi Project is estimated to be completed in 1967.

Most research and agricultural promotional work of the Rice, Fishery, and Livestock Departments is a continuation of the first NESD Plan, where they still have to struggle against the shortage of extension workers. The rubber replanting project, on the other hand, in accordance with the Act of Rubber Replanting Aid Fund, made certain progress in that 5,693 cases had applied for the fund during the first half of 1967 for an area of 59,560 rais, which was a quicker pace of development work than before, while further administrative improvement has been made, and the aid increased from 1,500 Baht to 2,000 Baht per rai.

As far as land development is concerned, land classification on a large scale had been completed in 1966, and soil surveys and determinations on over 11.8 million rais of land had been made up to the month of June 1967, out of which 8.8 million rais were surveyed and classified in the North-East, 1.8 million rais in the Chao Phraya Project, and the remaining area in the Pasack Basin Project. Work on land cooperatives was further expanded in 1967, so that now 525 associations of various kind of land cooperatives are in existence, with about 41,526 families as members, and about 924,566 rais under their administration. The Agricultural and Cooperative Bank has been opened in the agricultural credit project, with its main office in Bangkok, and five branches at Chieng Rai, Petchabun, Phra Nakhon Si Ayutthaya, Udorn Tanee, and Petchburi. 8.7 million Baht in loans had been made directly to farmers up to March 1967, with another 208 million Baht loaned through agricultural institutions, while 10 more branches of the bank are expected to be opened in the provinces by the end of 1967.

1968 Projects

Main work in agricultural development projects for 1968 is as follows:

1. Irrigation and Flood Control.

1.1 Sirikit Dam, Uttaradit.

Construction work is at the primary stages, with more excavation on earthwork and on the dam's rocky base. Concrete work has been started on certain parts of the dam, while earth surfaces have been removed where the earth dam is to be built to close the mountain gap. Roads have been constructed and more have been asphalted within the Headwork area.

1.2 Greater Me Klong Project, Kanchanaburi.

Construction work continues on the Vajilalongkorn Dam, and compound buildings are already erected. Excavation of an additional 18 kms. of the main left distributing canal, as well as further 168 kms. of 24 feeder streams. Buildings have been erected in the canal, with concrete-lining of 120 kms. of the canal, while dredging work will be started on a drainage canal of 2,000,000 cubic meter capacity. Topographic surveys will be made in the vicinity of the water reservoir areas at the Kow Kwang Dam, and at Kow Wang Masang, as well as surveys for the laying of an additional distributing canal.

1.3 Pran Project - Prachuap Khiri Khan.

Additional primary construction work will be made including construction of road networks leading to, and within the headwork, construction of living quarters, installation of electricity and telephone systems; construction of dam foundation; excavation and concrete-lining of the main distribution canal for the length of three kms. There will also be surveys on additional details within the headwork and distribution canals.

1.4 Pattani Project, Pattani.

The main objective is to irrigate 372,000 rais of cultivated areas in various districts of the Pattani Province. This is a 5-year Project for the period 1968-1972. Most of the work for 1968 will be involved with survey work on soil and distribution canals and others at the same time as primary construction work started, which will include clearance of jungles within the headwork area, construction of roads within and leading to the headwork, installation of electricity and telephone systems within the headwork, as well as temporary living quarters. Surveys will be made on the purchase of 500 rais of land.

1.5 Oon Project, Sakon Nakhon.

Primary construction work will be continued from the slight work started in 1967. Work will be started on the construction of the headwork; waterway; two main locks; excavation of 10 kms. of the main distribution canal; concrete-lining of 2.5 kms. of canal; erection of 4 buildings in distribution canals, as well as survey work for the purchase of 2,500 rais of land.

1.6 General Irrigation Projects.

1.6 (1) Weir Irrigation. 14 projects are planned for the construction of weirs to help provide irrigation systems for farmers outside the zone of stare irrigation work. The irrigated areas will be increased by another 500,000 rais once these projects are completed.

1.6 (2) Reservoir-construction in the North-East. 10 reservoirs together with distribution systems will be constructed in eight provinces. Most of the work will be finished

by 1968, with the exception of two which will be finished in 1969. The irrigated area will be increased by another 60,000 rais, once these projects are completed, making the total capacity of approximately 74 million cubic metres for these 10 reservoirs.

1.6 (3) Ditch and Dike Project. Excavation of another 4,832 kms. of ditches and dikes within irrigated areas, with another 322 kms. of drainage streams, as well as construction of 4,082 buildings for the water control and measurements.

2. Land Development

2.1 Land Classification Program.

Completion of 1967's remaining surveys on land capability in the provinces of Maha Sarakham, Khon Kaen, Sakon Nakhon, Roi Et, Nakhon Phanom, Chon Buri, and Prachuab Kiri Khan, and further surveys on the provinces of Chiang Mai, Udorn Tanee, Nakhon Ratchasima, Trat, and Narathiwat. Land census will also be made in Kalasin, Sakon Nakhon, Maha Sarakham, Nakhon Phanom, Nong Khai, Chon Buri, Chaing Rai, Prachuab Kiri Khan, and Roi Et.

2.2 Land Conservation Program.

Demonstration on the use of fertilizers in the North-Eastern provinces by the establishment of 12 pilot fertilizer production farms. Research center established in Pathum Thani towards the improvement of acid soil, with another center is Samut Sakhon for the reclamation of saline soils, together with the central center at Chachoengsao for advice on reclamation methods.

Other than these, Soil and Water Preservation Centers will be established in Chiang Rai and Nan, making a total of 13 centers together with those already set up. Nine mobile units for the Soil and Water Preservation work will also be set up under the accelerated rural development projects, which will operate over 22,000 rai of land. Projects for land conservation and development will be promoted in nine provinces in the North-East, and two in the North, with further extension to two provinces of Chiang Rai and Maha Sarakham, making a total operating area over 13 provinces.

Experimental projects for the preservation of pasturelands will be continued at Amphoe Borabu in Maha Sarakham Province, over an area of 800 rais through cultivation of plants for animal food, and fodder production to be used in dry seasons. At the same time, work will be carried out in 1968 to develop river basins by prevention of land erosion in the Lam Takong Basin of about 39 sq.kms. with another 10 sq.kms. area in the Nam Huay Mae Nai Basin in Chiang Mai.

2.3 Land Policy Program.

A census will be made of landowners who lease out their lands to obtain data on total land area, locations, holdings, with another census on land-lease in five provinces in the Central Plain, measures will also be taken to improve the laws of tenure, as well as suitable revisions made in the laws for the supervision and control of farm leases to insure better security for farmer lessees. The land management project will continue, however, in the Kamphaeng Phet Province over 37,500 rais.

2.4 Soil Survey Program.

Work will be continued on soil surveys and mapping with completion of surveys on soil capability for agricultural work in the North-Eastern provinces of Sakon Nakhon, Nakhon Phanom, and Nong Khai. Similar work will be expanded to Loei, Udon Thani, and Khon Kaen, with a total area of 1.5 million rais under survey. There are also accelerated projects of soil surveys under the assistance of UNSF, which will be operated in various provinces over 1.5 million rais of land.

3. Rubber Replanting Scheme.

Rubber-replanations have been made in about 228,000 rais of land, which is approximately 23 percent of the old plantations which should be replanted. The Office of Rubber Replanting Aid Fund has submitted an accelerating replanting scheme through the use of the accrued 288 million Baht aid fund, which would increase the replanted areas by another 211,000 rais within the three years of the 1968-1970 period. The 1968 targets aim toward the replantation of 56,000 rais, while an additional fund will have to be sought in 1971 to increase the replanted area by another 112,000 rais which would bring the total area of replantations since the beginning of the Scheme to about 551,000 rais or about 55% of the old rubber estates.

4. Agricultural Research and Experimentation

4.1 Program for Agricultural Economics Research.

Development of statistical work is already in hand, through the expansion of such activities over a wide area. Study on various bases, for survey projects and farm policies as well as study of the cost of living and farmers income obtained from their production.

4.2 Agricultural Development Center Program.

Adjustment and improvements will be made on pilot farms and agricultural experimental centers in Chai Nat and Khon Kaen; with further research and experiments on technical matters of various branches such as Soil Science, Agricultural irrigation, preliminary yield trial; experiments on the cultivation of crops before and after the rice growing season; plant pathology, animal food and diseases, as well as on the rate of farm production and fish breeding in paddy fields. Extension workers will also be sent out to various regions to promote modern agricultural techniques, while work on the pilot farm at Petchaburi will be further extended by the creation of more pilot farms in about 50 farmer holdings. Further work will be made on the Huay Si-ton Pilot Farm, which will also be in its last year of assistance from the UNSF. The Agricultural Engineering Research Center will also study and invent rice and sorghum threshing machines; pontoon tractors for use in miry grounds; centrifugal rice hulling machinery; harvester machinery suitable for lowlands, as well as research on the best means of conversion and conservation of agricultural products.

4.3 Agricultural Experimentation Research Program.

The following are the main projects for this program. agricultural research and experimentation on the ditch and dike project area which are to be carried out by various organs in the Ministry of Agriculture; research on the fertility of soil, a 5-year project on the assistance of the UNSF (1966-1970); survey and research on poisonous elements in accordance with the Poison Act of 1967; while further extensions are to be made on research work of agricultural and rice stations so that farmers can benefit from such results.

5. Extension Services.

Principal projects of this branch of work include promotion work of medium level agriculture; co-ordination of promotion efforts in 12 provinces of the ditch and dike project area, and seven provinces in the Me Khong Project; in conjunction with the accelerated rural development projects and security committees of the zones operated; the mobile development project in the North-East, and development work on economic crops such as rice, cotton, maize, sorghum, coconut, rubber etc., which could be classified as follows:

5.1 Rice

Promotion of better grade rice, by the sufficient production of these grains, or about 400,000 kgs. to distribute to farmers for further cultivation according to the nation-wide project to promote the expansion of better grade rice. Introduce various measures to accelerate beneficial results of such promotional work to reach the farmers through establishment of four centers at an amphoe level in each region, with 1,050 plots of modernized pilot farms in 65 provinces, as well as 135 pilot plots for fish breeding in paddy fields of 50 provinces. 400 pilot farms for the rotation of crops after the rice growing season in 70 provinces, and distribution of about 2,000 tons of fertilizers to various farmers.

Other than these, the fight against pests and diseases will be extended from 1.5 million rais area to about 2 million rais, with expansion of the area for control of rice gall midge and yellow orange-leaf diseases. Co-operation will be given at the same time to the Accelerated Rural Development Department, as well as to provincial and district officials in the training of farmers on pest and disease control, while four mobile pest control training units will be sent out on operations. On experimental work, pilot farms will be continued on a larger scale, as good results have already proved that the targets of such experiments have been achieved, so that another 72,000 rais of farms will come under this experimental administration, making a total of about 95,000 rais of pilot farms in all.

5.2 Cotton.

Cotton producing areas will be expanded to achieve the following figures: 20,000 rais in Nakhon Sawan; 25,000 rais in Nakhon Ratchasima; 6,000 rais in Kang Krachan; 7,000 rais in the Nakhon Pathom-Suphan Buri zone, and 2,000 rais in Kalasin. As no less than 50,000 tons of linter is needed to supply the cotton industry each year, linseed production will have to be expanded so that no less than 10,000 rais of land will have to be devoted to linseed production.

5.3 Maize-Sorghum.

Improvement of seed strains must be made to increase the yields per rai, while about 100,000 kgs. of better grade seeds for cultivation must be produced. Farmers will be encouraged more and more to grow maize and sorghum in suitable areas, while they will be given correct information on soil fertilization in keeping with the latest technical and economic concepts. In addition, further research will be made on the control of pests and diseases which could damage the grains stocked in the granaries.

5.4 Jute.

Besides the improvement of the varieties, emphasis will be made on the improvement of jute quality by study of the efficiency of fiber-scraping machines as well as on the various types of fiber-peeling apparatus. At the same time, methods of fiber retting to obtain good quality jute, as well as study on the quality of fiber washed by farmers accofding to the type of water will be made, as well as the various methods employed.

5.5 Coconut.

Ten pilot farms will be further expanded in four provinces, with about 300 rais of land cleared for the planting of better grade coconuts for the production of seeds. 10,000 coconuts will be germinated for extension of their species to planters.

5.6 Mulberry and Silk Worms.

About 600,000 good grade silk worms will be distributed to breeders, plus distribution of mulberries to farmers so as to bring the mulberry cultivated area up by another 1,000 rais. Work will be carried out in cooperation with the Public Welfare Department to promote silkworm breeding in various land settlements.

6. Forestry

Forest protection activities will be strengthened by the addition of 40 forest protection units, so that with the 88 units already in existence, there will be a total of 128 forest protection units in all, with duties over 250,000 sq.km. of forest throughout the country. Work for the suppression of illegal tree felling and wanton destruction of forests will be carried out with the cooperation of the Agricultural Aviation and the Forest Patrol Units, while work for the preservation of forests will include surveys of the forest conditions as well as demarcations of the zone approved by the Cabinet as the national forests, which cover approximately 39,000 sq.km. in area.

In addition to this, inspections will be made on the country's destroyed forests, with rehabilitation work, supervision and control over 15,900 sq.kms, of the country's preserved forests. Another important project will be that of teak planting and the planting of other woods, with about 15,000 rais in various regions in the North and North-East devoted to the plantation of the former, and about 8,000 rais for the plantation of the latter.

Moreover, to insure that all forestry projects throughout the country succeed in creating permanent and endurable forests which will be of high and stabilized yields, five more forest management units will be set up in the teak forest area of the North, and in the pilot forest at Mae Ngao, in Lampang. The Parks Project will include development of 19 national parks, through the planting of more wild flowering plants; construction of footpaths in the grounds; erection of signboards specifying the species of the plants; repairs of buildings in the grounds, and the establishment of a national park at Nam Hao, in Petchabun. Improvements, will also be made on the 11 existing national parks, as well as on two botanic gardens and 12 other arboretums.

Surveys will be made in the Wildlife Prorection and Preservation Project for the creation of another Wildlife Preserved Forest at Klong Nada, Ranong, as well as establishment of another Wildlife preservation unit in the National Park at Kao Sam Roi Yot. Development will be made on work in six wildlife preserved areas already surveyed as well as on wildlife protection Units in two national parks.

7. Fishery

Acceleration will be made on saltwater fishing activities through biological and growth studies of fishes with economic value, with surveys of fishing grounds, experimentation with modern fishing methods as well as invention and adjustment of the various fishing equipment. Boats will be designed to produce better performance and greater efficiency, and radio stations installed to provide information and communication services to fishing boats at sea.

Development of the fishing industry will be made through studies and comparisons of various methods of transportation for fresh supplies, with biochemistry studies and research on the raw material and products of the sea, as well as on fish processing procedures. Looking now at the side of marine-fishing training, aid requested from Japan will be given in the form of a Regional Fishery Development Center of South East Asia, with the training center in Thailand, and the research center in Singapore. Details of this Project are still under the study of the various international groups concerned, but it is estimated that the work of this program could be started in 1968.

As far as development work on fresh water fishing is concerned, an additional fresh water fishing station will be established at Nong Khai, bringing the total to 14, the target being to increase the production of fishes, with economic value by another 20 percent, as well as to gather the various species of aqua animals from natural water sources for distribution to the people and for their further multiplication in the general water resources. Natural water resources will be somewhat improved to create a suitable condition for the permanent fish breeding promotion.

A brackish-water fishery, will also be developed by the establishment of one mobile unit to render technical assistance to fishermen, so that brackish water fishes can be reared in suitable areas.

8. Livestock

A livestock promotion program for the maintenance and expansion of breeds will be carried out in 10 breeding improvement centers, six distribution centers, and two poultry husbandry promotion centers.

A program for animal castration services will be provided in the zones of operation, while mobile breeding promotion units will have 130 bulls for breeding 3,000 cows. Two more centers will be established for artificial breeding purposes at Songkhla and Saraburi, with three other branches at Samut Prakan, Thon Buri and Min Buri, with targets set for the breeding work on 4,000 cattle and 14,000 pigs.

Promotion of pig breeding and upkeep will be carried out in five livestock breeding centers, which should be able to produce about 2,200 more hogs for distribution. Other than these, there are another 130 pig breeding centers under government sponsorship, which should produce an additional 4,000.

Most of the dairy cattle breeding is still in the experimental stage, with tests carried out on their life capacity in surroundings which should prove of productive value, while 100 crossbred Broen German calves will be reared for comparison tests on their growth and milk productive capacity.

Research on veterinary and animal husbandry work will also be accelerated to obtain more effective results, with accelerated production of 14 varieties of vaccine and antigen for the prevention and eradication of various diseases such as foot and mouth disease, rinderpest, anthrax, pig cholloera, poultry Newcastle disease, and others, with also a mobile veterinary service unit for this purpose.

9. Agricultural Institutes

9.1 Land Cooperatives.

Works in this program will be composed of:

9.1 (1) Land Development Cooperatives. - works of which may be classified as follows:

Land development cooperatives in the North-East - improvement introduced by excavation of another 47 kms. of the main canal, and another 81 kms. of the feeder canals. Other development works will be improvement on the distribution canals, construction of bridges across these canals, clearance of jungles, for cultivation-grounds, and roadworks. Three additional land development cooperatives will be set up over a 80,000 rais of ground within the Lam Takong Irrigation Project in Nakhon Ratchasima; Nam Pong Project in Khon Kaen, and within the Weir project area at Tarnprasart Village, Amphoe Phimai, Nakhon Ratchasima. Economic surveys and ways and means for the establishment of more land cooperatives in the next year will be sought over an area of 143,000 rais.

Land Development Cooperatives for the Central Plain. - Improvement of existing work by excavation of another 37 kms. of main canal, and 92 kms. of feeder canals; improvement of ditches; land clearing, as well as work expansion by establishment of land cooperatives within the Pet and Chao Phya Dams Irrigation Projects over 150,000 rai area. Establishment of cooperatives for installation of waterpumps over 12,000 rais in Kanchanaburi,

and Nakhon Pathom, as well as surveys on the prospective establishment of more cooperatives the following year over a 75, 999 rai-area.

Land Development Cooperatives for the North. - Improvement on existing works by excavation of 12 main distribution canals, and 8 kms. of feeder canals, as well as maintenance work on roads and dikes. Work expanded by establishment of seven more land cooperatives over a 65,000 rais area, with survey on 269,000 rais for possible further expansion.

Land Development Cooperatives for the South. - Development of existing work by excavation of 8 kms. of distribution canals, and 12 kms. of feeder canals; land clearing; installation of water pumping machinery; as well as work expansions by establishment of three more land cooperatives at three points over 15,000 rai area, with surveys on the prospective establishment of cooperatives for another 13,000 rais.

9.1 (2) Land Settlement Cooperatives. Work may be classified as follows:

In the North: - expansion of land settlement cooperative work over 30,000 rais of land in the Dong-ka-Forest, Sukhothai, plus more than 40,000 rais area in Chiang Mai.

In the Central Plain:- Establishment of a fishery cooperative in the Samut Prakan Province on over 5,000 rais of land, as well as surveys on the possibility of expansion of further cooperative work in another 5,000 rais within the Samut Pakan Province.

In the South:- Allocation of 30,000 rais of land; land classification work on 20,000 rais as well as surveys for land reservation purposes of a 50,000 rai area.

9.1 (3) Cooperatives of Land Tenants and Land Hire-Purchase. - Works may be classified as follows:

In the North:- continuation of former work, but with certain developments; maintenance of mechanical equipment; repairs of 6 kms. of road; promotion of crop cultivation on a 13,000 rais area.

In the Central Plain:- management of irrigation systems, improvement and excavation of distribution canals, as well as laying drainage pipes.

In the South:- Improvement through repairs of 8 kms. of road, and 6 kms. of distribution canals.

9.1 (4) Cooperative Society and Diary-Cattle Breeders Cooperatives: Establishment of various cooperatives at the following locations:- one land development cooperative at the Chao Phraya Dam; one agricultural land settlement, and dairy-cattle breeding cooperatives with two collecting centers at Nakhon Pathom and Phra Nakhon Si Ayutthaya, cooperation with the Danish government in establishing a milk production factory in Bangkok.

9.2 Commercial and Monetary Cooperatives.

All projects in the commercial and monetary cooperative work, such as foundation of cooperatives for capital-raising, for credit for agricultural production, for agricultral and industrial products marketing, and for rice marketing will be postponed for the time being, while multipurpose cooperatives will be set up instead which would merge all the works of agricultural cooperatives as well as land cooperatives.

9.3 Multipurpose Cooperatives.

In order to have the various cooperatives operated on the multipurpose scheme, as well as to produce better efficiency for the benefit of their members, multipurpose

cooperative centers will be set up under the administration of the Office of the Under-Secretary of the National Economic Development Ministry. Extension Workers will be sent out to study the economic conditions of the former cooperatives as well as that of their members for the ultimate aim of setting up multipurpose cooperatives in Chai Nat, Petchabun, Sushothai, Phetchaburi, and Chumporn while further surveys will be made on further expansion of multipurpose cooperatives in the Central Plain, North, and in the North-East.

9.4 Farmer Groups.

Promotional work on various existing farmer groups, such as those of rice growers, agriculturists, and young Farmers' associations to produce more efficiently as well as to enable direct and most benefits for their members.

Industry and Commerce.

Most of the projects carried out in 1967 have achieved their targets as set up by the second NESD Plan, except for the Industrial Estate Project which did not receive budget allocation in time for 1967, so that its program had to be postponed to the fiscal year 1968 with slight improvements.

Work for the promotion of medium and large scale industries under the Industrial Promotion Act included approval of promotion of 135 industries from the beginning of the fiscal year to July, while the total registered capital reached 1,737 million Baht. Industries promoted could be classified as follows: 42 cases for metal-processing industry and machinery production; 37 of agricultural industrial production; 23 of hotel and service business, while the remaining covers handicraft works, and pharmaceutical production industries. The various applications for industrial promotion have been considered more rapidly, and improvement has also been made in administrative and personnel fields, while promotion has been withheld for industries classified under Groups A and B.

As far as loan assistance to various industries is concerned, the Industrial Finance Corporation of Thailand (IFCT) has granted 81 million Baht in loans to 22 cases within the first 10 months of the 1967 Fiscal Year, which included five for hotel business, and others for metal-processing, textile and mining industries. The Corporation has made improvements on its administration, even though it still has to face problems over the shortage of Baht currency, so that it is selling additional shares of 30 million Baht to the Bank of Thailand under the guarantee of the Ministry of Finance.

On the side of promotional work for small industries, the Institute for the services of Small Industries has been established and is experiencing a delay because of the difficulty of the United Nations in selecting exports for assistance. The Institute has already sent 25 technicians to receive further training abroad, and has already conducted surveys on metal moulding and processing industries.

More loans for small industries have been granted than in previous years within the first 10 months of 1967. 16.7 million Baht in 63 cases, which were mostly for investments in the provincial areas. Consideration for the grant of these loans is still faced with problem of high guaranteed assets, while organization of the administrative activities should be more independent or in the form of corporations. Works for the establishment of Industrial Estates on the other hand, are somewhat behind schedule, and are expected to be started in 1968.

Analytical work and research done by the Institute of Applied Science of Thailand on fiber and textile materials were concentrated on the planting and retting methods of jute, with results underway for introduction and demonstrations to farmers in the North-East and various governmental bodies concerned.

Efforts were also made on mining and metallurgical research to produce better grade iron, as well as tests on manganese ores and construction materials for use in domestic industries. Good progress had been made in research and analytical works, although greater efforts will have to be made on promotional work to produce even better results.

1968 Projects.

A. Industry.

To achieve even better and quicker results in industrial development work, the government has the following plans to promote industry, especially those in the private sector:

1. Investment Promotion.

Governmental promotion of industrial investments both by financial assistance and the grant of special privileges will be given through the following channels:

1.1 Industrial Finance Corporation of Thailand (IFCT). -

Amendments have been made in 1967 on the IFCT's regulations over government's guaranteed loans in that the government will not guarantee the IFCT's loans for the total amount exceeding 500 million Baht. To obtain enough funds to meet industrial demands, the IFCT has sold more shares and will sell bonds to private individuals and financial institutions. 5 million American dollars have already been loaned from the Asian Development Bank, while negotiations will be held for further loans from various foreign sources.

1.2 Board of Investment.

Studies and improvements will be made on the issue of promotion certificates, including both policies of the general industrial promotion, as well as on promotion of the general industrial promotion, as well as on promotion of specific industries. Such measures will stimulate industrial growth in accordance with the national economic needs, and create a suitable economic situation for the country. Special emphasis will be made on coordination of the various governmental bodies concerned, as well as on the services offered to private industries.

2. Industrial Development Projects.

These have already been incorporated in the second NESD Plan (1967-1971) with the following goals for 1968:

2.1 Promotion of small industries, which will be given in three forms:

2.1 (1) Services for small industries. This is a continuing project from the first NESD Plan with technical and financial assistance provided by the UNSF since 1966, in the form of personnel-training which can in turn offer training services to various enterprises in general; surveys of various industries to decide on the correct and suitable assistance. Skilled workers and work supervisors have also been trained, with technical services and management of small industries given. Work on the office buildings will be continued in 1968, with training given to 200 general and skilled workers as well as rendering services to light engineering industries in Bangkok and Thon Buri.

2.1 (2) Expansion of Marketing Services for Industrial and Thai Handicraft Products. Promotion of production and marketing fields will be made by the establishment of a handicraft show center at Naraipan Store to promote both sales and

publicity for domestic and foreign markets. Additional assistance will be the provision of technical equipment for producers, technical training in marketing fields; direction of designs in line with demands of both domestic and foreign markets, with a request in 1968, of an expert to help draft projects for further assistance from the UNSF in this branch of industry.

2.1 (3) Loans for Development of Small Industries. To enable investors in small industries who want to expand productive capacity, or producers who have run out of money to make loans at low interest for investment in their industrial activities, the government has set up a loan fund of 10 million Baht each year, half of which is to be met by the National Budget, and the other half by the Krung Thai Bank. This loan has been widely expanded and extended to various provinces all over the country, while it is estimated that loans could be made to 25 cases in 1968.

2.2 Productivity Promotion

The Productivity Promotion Center of Thailand has carried out projects with the assistance of the UNSF which have already been terminated. This Center trains officers of both state and private enterprises in various branches of work according to the demands of the factories, and in 1968, their work will be expanded to giving advice to various enterprises with the assistance of the UNSF.

2.3 Scientific Research and Industrial Standardization.

2.3 (1) Industrial Scientific Analysis and Research. This project will cover industrial scientific analysis and research on various matters such as the food and ceramic industries, chemical enineering, industrial and agricultural raw materials and by products, as well as industrial toxic matters. The resulrs of this scientific work will be announced and published for the benefit of those who are facing such problems and obstacles in their industries, as well as for the purposes of laying basic guidelines for future investments of new industries. Also, the Technical Science Institute will carry out research and scientific analysis on other aspects of industry.

2.3 (2) Industrial Standardization. At present, industrial products, both local and imported, are not regulated by any definite standards of quality, so studies will be made in 1968, with the view of establishing at least 10 standards in accordance with the Industrial Standardization Act, with particular consideration to economic suitability and safety for the consumers.

2.4 Sugar Promotion Center

As the cost of sugar production is still high in this country, domestic consumers are having to buy sugar at a high price. This center is established with the aim of reducing the cost of sugar production through its experiment stations which will give technical assistance to sugar factories and planters, as well as carrying out research and tests to improve both the quality and quantity of sugar. Agricultural credits for farmers will be further developed, while foreign experts will be sought to give advice on technical, marketing and other problems to improve the efficiency of sugar production.

2.5 Industrial Estates

This project has been postponed from the 1967 Fiscal Year, and is presently under scrutiny by the Ministry of Industry as to the suitability of areas for the establishment of this Industrial estate which will be promptly carried out.

3. State Industrial Enterprises

3.1 Fang Oil Refinery.

About 7 drill-holes will be made in the oil-exploration work in 1968 within the vicinity of Nongbuakao, Huaybon, Pa-sarng, and Huay Muang villages, while refinery of crude oil from Chaiprakarn, and Maesoonluang, in Chiang Mai will be done for the production of about 100,000 barrels. Also, technical training will be given on oil refining work as well as improvements made on the Fang Oil Refinery to produce an increased all around efficiency.

3.2 Bangkok Dock Company Limited.

Measures will be introduced to improve and enlarge its ship repairing services, while work will be extended to include ship building, particularly of small coasters not exceeding 90 meters in length. Procurement of machinery and equipment for this purpose, as well as construction of buildings for the installation of such apparatus will be completed within the 16 months estimated time. Officers will be sent for further training abroad in foreign docks, while foreign dock experts will be hired to give technical advice to increase the efficiency of work laid out in the Project.

3.3 Battery Organisation.

Purchases of machinery, equipment and provisions as well as land and factory toward an investment to produce 200 battery jackets and 350 sets of battery separators per day.

B. Mining.

Mining development projects of the Department of Mineral Resources are continued from the first NESD Plan, of which the following programs have been scheduled for 1968:

1. Exploration and Development of Artesian water.

Drilling and exploration will be made on 350 water wells in the North-East, and 125 in other regions, making a total of 475 wells in all, with the use of 18 drillers, which is two more than those used in 1967. The Mineral Resources Department will work closely with the Department of Public & Municipal Works and the Department of Health to ensure supplies of clean water throughout the kingdom for the sake of those living on barren land.

2. Geological Surveys

This project aims at obtaining basic data on soil qualities, besides comprehensive geological information on the existing quantities and types of minerals as well as their qualities to obtain an overall information on the national mineral resources which would prove of use in the further development of the mining industry. Basic geological surveys will be carried out in the South and other regions, while land classification surveys will be made with the co-operation of the German government. Various mineral surveys will be made, such as those on tin ore in the South, iron ore, base metal ores, fertilizer minerals, manganese as well as natural fuel materials in various areas all over the country.

3. Mine Developments

Absence of proper mining techniques and modern machinery and equipment are the cause of high production costs and low volume of production. Thsi project therefore

aims at providing various services to private mine owners, such as giving advice, demonstration of mining techniques, inspection of the mines, experiments on ore processing and use, as well research to solve various problems and obstacles by the establishment of Mineral Resources centers in Phuket, Songkhla, and Chiang Mai. Also, promotion will also be given to the metallurgy industry, through research on alloy structural capacities, metal smelting and enamel works, etc.

C. Commerce.

This involves projects already incorporated by the second NESD Plan, but which are subject to delays because of the insufficient number of workers to carry out the works. Two projects will be given priority in 1968, which are promotion of the export trade, and promotion of various vocations of Thai nationals.

1. Export Promotion.

With cooperation of the Economic Relations Department as well as of the Commercial Public Relations Department, promotion of trade and Thai handicrafts, both abroad and within the country, will be carried out through the organization of international trade fairs, as well as entry in any suitable trade exhibitions in various countries. Cooperation of the various governmental bodies concerned are necessary to insure success of such activities.

Other than these trade exhibitions, studies, surveys, and analytical work will be carried out on marketing aspects both foreign and domestic while data will be gathered on the volume of production and sales. Advice and services will be provided on packing procedures to facilitate the transportation of these products, while training on marketing matters will be given both on technical and practical bases as guidelines for the solution of any existing problems. Future expansion of work will include the establishment of industrial export trade and Thai handicraft centers abroad to widen the markets for Thai products.

2. Promotion of Commercial Activities for Thai Nationals.

This is to promote retail trade and small-business among Thai nationals. The government will make an annual financial allocation of 5 million Baht which will be matched by a counterpart fund from the Bangkok Bank and the Krung Thai Bank. It is estimated that assistance in the form of loans at a low rate of interest can be made to 100 cases annually, although only 2.5 million Baht has been allocated in the National Budget for 1968 for this first stage of experimental work. Acts and Regulation on the above loans are presently under the study of the Committee concerned.

Communication and Transportation

In development programs for 1967 of the various communication systems, of post, telephone and telecommunication services, the government signed a contract in June with the Standard Elecktrik Lorenz AG Company for the installation of communication systems in Zones 4 and 5 for the Northern and Southern Provinces, work for which will be completed in 25 months. A mobile Station for the satellite telecommunication projects toward the promotion of international communication has already been completed, with operations started in April 1967, while the permanent ground station is presently being constructed by the General Telephone and Electronics International Inc. which has won the price bid. The government has also signed a loan of 84.3 million Baht from the Export-Import Bank for this project.

Two telephone junctions have been opened at Nonthaburi and Phra Pradaeng in the development of metropolitan telephone services, with 600 additional numbers installed bringing the total of telephones in the Metropolis to 55,600. Telephone junctions were also opened in six provinces for the installation of 960 numbers, while 1,400 additional numbers were installed in four provinces which already have telephone service.

Highway development work in 1967 covers the present construction of 17 main highways for the total length of 1,945 kms, most of which is being carried out by private contractors. Construction work on the whole has been going on well. Routes financed by foreign loans are expected to be finished on schedule, but there are some cases in which a shortage of construction materials is a problem to be solved. Another problem which has caused delay of highway construction arises from complexities and procedures in the selection of contractors in accordance with conditions imposed by the foreign loans.

The general road-asphalting programs for 1967 cover the present work on 27 routes for about 1,555 kms, which are mostly undertaken by contractors, and which are mostly behind schedule particularly in the South because of heavy rainfall. Late starts and shortage of experienced engineers and mechanical equipment also contribute to such delays.

Main development work on the railway services for 1967 consist of the construction of the Kangkoi-Buayai line for the distance of 250 kms., which was started in 1963 and completed for use in August 19, 1967. Engineering surveys have begun on the Denchai-Chiang Rai-Chiang Saen line, with economic surveys begun on the Klong Bangpro- Lamchabang-Sattaheep line to complement the Project for the second seaport on the east coast. On development of goods-transportation services, 40 additional freight cars have been purchased as well as 20 sets of diesel locomotives.

On the side of air transportation developments, the government signed a contract for the construction of an airport at Hat Yai August 8, for completion in 1,200 days. Work on the extension of the runway at Pattani Airport has been completed, while construction has already begun on a passenger terminal station and air traffic control tower, at Chiang Rai Airport. Installation of various apparatus for the runway and parking spaces at Phitsanulok Airport are also underway, while 1,540 rais of land were purchased in 1967 for the construction of the second commercial airport near Nong-ngu-hao, in Samut Prakan.

Surveys have been made on the deep-water channel leading to the port of Pattani in a program for the development of water transportation, while six additional wharves to relieve the congestion of the Bangkok port have been designed, with bids opened for the construction of additional warehouses. The government is also negotiating for USOM's assistance on the economic and engineering surveys for the erection of a second seaport off the east coast.

1968 Projects.

Economic development projects on the communication and transportation sector is part of the second National Economic and Social Development Plan (NESD) (1967-1971), although works on such projects have been revised and adjusted to keep in line with the present economic situation, availability and suitability of the governmental organs concerned, as well as with the financial capacity, with consideration given to work achieved in 1967, which is the first year of the second NESD Plan.

As far as work scheduled by the 1967 projects is concerned, there are some projects which could reasonably be expected to achieve the goals of the Plan although some of the main projects are behind schedule, such as that for the development of telephone services for Bangkok and Thon Buri, which should have increased another 9,200 numbers according to goal of the Plan. Instead, only about 50% of the estimated line expansion was achieved in 1967, with building work completed on three main junctions.

Development of rail services through the purchase of 78 diesel locomotives, 205 passenger cars, and 435 freight cars was planned, but so far only designs have been made for the purchase of diesel-locomotives and passenger cars, with preparations and acquisition of material and apparatus for the building of freight cars.

The NEDS Plan has set a goal for the construction of 30 midstream dolphins in its development program for the port of Bangkok, but so far nothing has been done in this project at all. It has been estimated that the project for the installation of telecommunication systems in Zones 4 and 5 would be completed by 1967, but this has not been achieved as planned, and the time period will have to be extended to 1969.

There are also some projects in the highway development which are similarly behind schedule, such as those for road asphalting, construction of the Chokechai-Dejudom, of the Lomsak-Choompae, and Lomsak-Saraburi routes. Such delays could be mainly attributed to difficulties in the search for finaacial sources and support, as well as to immature stages of contractors' preparations in some cases.

For these reasons, it is necessary that revisions and adjustments be made in the Plan to keep pace with the actual situation and to produce better efficiency. The revised plans for transportation and communication work for 1968 are essentially as follows:

1. Office of the Under-Secretary of the Ministry of Communications.

1.1 Research, Survey and Data Analysis on the Services and Expenses of the General Means of Transport Throughout the Country.

Statistical sampling surveys will be made on the various points of trade, transport, and production centers and communities within the Development Zone throughout the 71 provinces of the country to find out the causes of obstacles and problems in transportation matters, as well as to study the commodity freight rates.

1.2 Institute of Nation-wide Transportation and Communication.

This project is scheduled to start in 1968 with the following work programs:

Evaluation of the following aspects of transportation with collaboration of the USAID's experts: the general situation, service demands; laws and regulations on control and administration of national transporation as well as making a draft plan to develop the above transporation systems.

Drafting of maritime laws, research and data analysis on the congestion problem at the Bangkok Port, as well as on the expansion of the Thai Maritime Navigation Company.

1.3 Telecommunication Training Center Under the Assistance of the United Nations.

This project is scheduled to train 380 technicians, 65 of whom will be specialized as long distance system operators, and 315 as regular mechanics.

1.4 Project for the Installation of Communication Systems in Zones 4 and 5 (In the North and South)

This covers the completion of the remaining construction work on the Telecommunication stations, and installation of apparatus as well as trial tests on the newly-installed equipment.

2. Department of Commercial Aviation.

2.1 Projects for the Development of Provincial Airports include

Construction of an airport at Hat Yai; extension of the Trang airport runway; improvement of the Loei' Airport runway; construction of an air passenger station building and air traffic control tower at Khon Kaen Airport; purchase of land for the construction of Mae Hong Son Airport; survey and design work for the construction of Nakhon Panom Airport; design work for the runway of Tak Airport: extension of the Chiang Mai Airport runway, and construction of the taxi way at Hua Hin Airport.

2.2 Flight Radio Communication Project.

Acquisition of two sets of NDB transmittors plus aerials for Khon Kaen and Sakon Nakhor airports; two sets of ISB Transmittor-Receptors and 1 set of Thai-English teletypes for Bangkok-Chiang Mai Communication Center, two sets of communication apparatus for Uttaradit and Loei airports; three sets of SSB for Navigating Equipment Stations at Chai Nat, Prachin Buri, and Rayong; four 10-kw electricity-generators and 4 sets of VHF/FM apparatus for the Bangkok-Phitsanulok communication Centers; purchase of land for the construction of Navigating Equipment Stations at Chumphon, Phitsanulok, Nakhon Ratchasima and Hat Yai; construction of tower for the runway lighting building at Lampang, Phitsanulok, and Phuket; and finally, construction of a building for Navigating Equipment at Khon Kaen and Sakon Nakhon air ports.

2.3 Project for the improvement of Don Muang Airport runway:

Surveys and designs for the development of the Airport buildings; construction of one emergency electricity-generator house; installation of flight direction lighting; construction of the eastern fly-over and asphalting of that in the north; levelling work on the shoulders of the western runway for an area of 10,000 sq.kms; stone lining of the drainage canals for an area of 10,000 sq kms; expansion of the airport westward; construction of a quarantine building, repairs made on the runway and taxi-way lighting apparatus including plane pilot lights; development and extension of the guard-house, a fire-ambulance garage, storage rooms for equipment, communication and electronic apparatus, as well as repairs on the sewage system, roads, electricity system, water works, and car parking areas.

2.4 Survey and Design of the Second Commercial Airport, which will be towards.

The purchase of an additional 2,900 rais, with survey and design work made with foreign assistance.

3. Department of Land Transportation

3.1 Quantitative Survey of Road Transportation.

Surveys on the volume of buses, trucks, as well as on the volume of goods carried on the road in the four regions, were started in October 1967, and will be completed in September 1968.

3.2 Passenger Terminals.

Passenger terminals will be constructed Chaiyaphum and Ang Thong.

4. Department of Harbors

4.1 Project for the Procurement of four Dredgers, one Surveyor and Buoy Tender.

Bid Preparations for the purchase of four dredgers, and one surveyor and buoy tender vessel, as well as training for these ships' personnel.

4.2 Dredging works on the navigation channel to the Southern ports.

This project will involve the construction of a sea wall, dredging office and dredgers workshop. A Navigation channel leading to the port of Songkhla will be dredged to 5.6 meters depth, while designs of wharves and sea wall will be made for the port of Narathiwat, as well as surveys made on the lines of dredging to be made on the navigation channel leading to the port of Phuket.

4.3 Geographical Surveys of Navigation Routes.

Surveys and groundwork on the route, mapping the streams of the River Noi from Amphoe Bangsai to the River Chao Phraya above the Chai Nat Dam, and the flow of the River Cheen from the Ta-cheen Estuary to Amphoe Singha Buri.

5. Department of Post and Telegraph.

5.1 Extension of Local Postal and Telegraph Services.

Work for the construction of local postal and telegraph offices will be made at the following 30 locations. Pak Kret, Pa-moke, Kratoomban, Bangspanyai; Nongkayarng, Chae-hom, Me Tang, Barn-Hong, Jom Thong, Viengpapao, Rongkwang, Tern, Vichienburi, Wang-Thong, Nakorn-Thai, Phen, Kamalasai, Phana, Maha Chana Chai, Prasart, Ruesislai, Sangka, Chatupaktrapimorn, Ta-yang, Tepa, Ta-sea, Kanom, Natavee, Bunnangstar, Ramant.

5.2 Development of International Radio Communication.

Purchase of the four channel separating equipment (model MUX/ARG including component parts for the establishment of radio-cable services between Bangkok-London).

5.3 Telecommunication Projects through the use of Satellite Systems.

Purchase of various equipment, such as central radio-telephone connecting equipment, Teletype machine of 5-unit system; telex-machine for hire; signal control and Inspection Equipment, and signal investigation; teleprint, transmitter, tape recorders; machines for communication purposes among the zones with permanent ground reception for satellite communication stations which will be completed by April 1968. Also, improvements will be made in the office of international telephone junctions, namely, in the speakers' rooms, the recording rooms, and official rest-rooms.

6. Highway Department

6.1 National Highway Development Projects

The following are 21 routes of Highway to be constructed:

Routes to be Constructed	Work Schedules for 1968
National Budget.	
1. Hot-Mae Sariang-Mae Laluang	work to the stage of rock laying base for 10 kms. and 49 kms. of asphalt paying.

Routes to be Constructed	Work Schedules for 1968
2. Kamphaeng Phet-Sukhothai	8.184 kms of laterite laying base; 5.00 kms. of asphalt paving; construction of 13 concrete reinforced bridges and angular pipes.
3. Mae Laluang-Koonyuang-Mae Hong Son	maintenance of service tracks in usable conditions in dry-seasons.
4. Tak-Mae Sot	26.8 kms of earthwork on road bed; 26.8 kms of surface work; and construction of three concrete reinforced bridges for the total length of 240 m.
5. Roi Et-Yasothorn-Ubon Ratchathani	Complete 13% of the 170 kms distance.
6. Nong Khai-Phon Phisai-Bung Kan-Nakhon Pahom	25 kms. of works on road-base; 2.6 kms. of asphalt paving of surface work; construction of 275 m. of concrete reinforced bridges and culvert boxes.
7. Suwannaphum-Ta Toom	Complete 24% of the 35 kms. route.
8. Chokechai-Dejudom	Construction work, and laying of temporary service tracks (at present, foreign loans are being negotiated for this project).
9. Charalsnidwongse	Complete 56% of the 6.918 kms
10. Prachantakarm-Kabintaburi--Arranyapratet	Complete 27% of the 56.3 kms. distance
11. Bangpae-Damnernsaduek	Complete 44% of the 15 kms. distance
12. Surat Thani	Complete 36% of the 30.5 kms. distance.
Foreign Loans	
13. Lampang-Chiang Mai	Continue to completion of the whole project of 100 kms
14. Nakhon Sawan - Chiang Rai-	Construction and supervision work over 142.2 kms.
15. Saraburi-Lomsak	Construction work on 15% of 309 kms. distance.
16. Udon Thani-Sakon Nakhon	Continue to completion 85% of the 160 kms. distance.
17. Sakon Nakhon-Nakhon Panom	Complete 40% of the 82 kms.
18. Khon-Kaen-Choompae	Complete 80% of the 94 km. distance.
19. Bangkok-Si Racha	Complete 26.67% of the 107.6 km. distance.
20. Bang Pa-in-Nakhon Sawan	Complete 35% of the 192 kms. distance.
21. Pattani-Narathiwat	Complete the entire work on the 97.6 kms. distance

Asphalt-paving will be made on the following 20 highways:

Roads to be Asphalt-paved	Work Schedules for 1968
1. Chiang Rai-Mae Sai	Complete 16% of the 62 kms. distance
2. Makasarakam-Kalasin - Sakon Nakhon	Complete 37% of the 169.7 kms distance.
3. Nong Khai-Ta Bor-Srichiangmai	Complete 62% of the 45 kms. distance
4. Ubon-Mukdaharn-Nakhon Panom	Complete 36% of the 150 kms. diatance
5. Yasothon-Amnartcharoen-Memarart	Complete 40% of the 124 kms. distance
6. Buachoom-Hongbuakoke-Korat	Complete 34% of the 149 kms. distance

Roads to be Asphalt-paved	Work Schedules for 1968
7. See kew-Nongbuakoke-Chaipoom	Complete 40% of the 121 kms. distance.
8. Korat-Chokchai	Complete 32% of the 31 kms. distance
9. Si Sa Ket-Kantralak	Complete 43% of the 62 kms. distance
10. Ubon-Chong mek	Complete 32% of the 74 kms. distance.
11. Chaiyaphum-Buayai-Barnseeda	Complete 33% of the 60 kms. distance
12. Surin-Tha Tum	Complete 19% of the 53 kms. distance
13. Surin-Prasart-Chong jom	Complete 24% of the 69 kms. distance
14. Kanchanaburi-U-tong	Complete 73% of the 47 kms. distance
15. Min Buri-Chachoengsao	Complete the entire 21 kms. route construction
16. Dao kanong-Pomprachul	Complete the entire 8.5 kms. route construction
17. Khok Samrong-Chai Badan-Buachoom	Complete 32% of the 51 kms. distance
18. Sing Buri-Ang Thong	Complete 23% of the 36 kms. distance
19. Kraburi-Ranong	Complete 21% of the 50.138 kms. distance
20. Ta noon-Takua pa	Complete 35% of the 71.16 kms. distance

There is also construction of the following 19 nonproject routes.

Routes to be Constructed	Work Schedules for 1968
1. Flyover bridge at Hat Yai	Complete 35% of the work
2. The Friendship Highway	30 kms 43-paved with asphalt
3. Pijit-Barn Sark Leck	Maintenance work over the 15,531 kms. distance
4. Lomsak-Darn Sai-Loei	62 kms to be repaired and maintained in usable conditions for the dry seasons.
5. Wang tong-Barn sark leck-Kaosai	Maintenance works on the 59 kms. road
6. Kamphaeng Phet-Toong po-taley	Maintenance work on the 16 kms. road, and construction of additional 59 kms. of temporary service tracks.
7. Chiang Rai-Mae Suai	Maintenance work on the 12.7 kms. route.
8. Lomsak-Darnsai-Loei (Loei-Koke ngarm)	Maintenance work on the 58 kms. route
9. Udon Thani-Wangsapung	Repair work over 55 kms. and construction of one bailey bridge.
10. Chaiyaphum-Kaeng Khoi-Phu Khieo	Repair laterite base road, and maintenance work over the 75 kms. route
11. Buri Ram-Nang Rong	Maintenance work over the 20.837 kms.
12. Chok Chai-Deiudom	Maintenance, and construction of temporary service tracks for 134 kms.
13. Suwannaphum-Ta toom	Maintenance work on the road.
14. Roi Et-Suwannaphum	Maintenance work on the 15 kms. road
15. Ta uten-Ta dok geo	Maintenance work on the 11 kms. road.
16. Chanthaburi-Pong Nam Ron-Sakeo	9 kms of work on road shoulders and base; maintenance work on 42.682 kms. distance and construction of 106 kms. of temporary service tracks.
17. Trat-Mai road-khlong Yai-Hard leck	Road maintenance and reinforcing work on 72 kms. of road base.
18. Road linking Phuket to the mainland	Work on road base and asphalted surface for 1,392 kms.
19. Singha Buri-Ang Thong	Complete 23% of the 36 kms. road.

6.2 Bridge Improvement Project on the following

Bridges Built on Routes	Work Schedules for 1968
1. Bridge across the River Yom	Complete 12% of the 100 m. concrete reinforced bridges.
2. Sukhothai-Tak	Complete with construction of bridges and box culverts
3. Sawankhalok-Sukhothai	Complete the construction of bridges and culvert box
4. Phro tan-Lom Lae-Uttaradit	Construction of a bridge and culvert of 11 m length
5. Lop Buri-Sing Buri	Construction of bridges and culverts of 25 m. length
6. Ubon Ratchathani-Mukdahan-Nakhon Phanom	Construction of bridges and culverts for a total length of 191 meters
7. Yasothon-Amnartcharoen-Kemarart	Construction of bridges and culverts for the total length of 287 meters
8. See kew-Nongbua Koke-Chaipoom	Construction of bridges and culverts to the total length of 350 meters.
9. Chonabot-Paniakiree	Construction of bridges and culverts to the total distance of 264 meters
10. Nakhon Ratchasima-Chok Chai	Construction of bridges and culverts to the total length of 45 meters
11. Sri Sa Ket-Kantharalak	Construction of bridges and culverts to the total length of 203 meters
12. Chaiyaphum-Bua Yai	Construction of bridges and culverts to the total length of 350 meters
13. Mitraparb-Sukapibarn-See kew	Construction of bridges and culverts to the total length of 67 meters
14. Bua choom-Nong bua koke-Nakhon Ratchasima	Construction of bridges and culverts to the total length of 200 meters
15. Mahasarakham-Kalasin-Sakon Nakhon	Construction of bridges and culverts to the total length of 43 meters
16. Surin-Tha Tum	Construction of bridges and culverts to the total length of 23 meters
17. Surin-Prasat-Chong jom	Construction of bridges and culverts to the total length of 110 meters
18. Crossroad to Amphoe Mukdahan	Construction of bridges and culverts to the total length of 35 meters
19. Nakhon-Panom-Tha Uthen	Construction of bridges and culverts to the total length of 82 meters
20. Varin - Dejudom	Construction of bridges and culverts to the total distance of 188 meters
21. Min Buri-Chachoengsao	Construction of bridges and culverts to the distance of 403 meters
22. Cross road junction to Lop Buri	Construction of bridges on culverts to 13 meters length
23. Khok Samrong-Ban Mi	Construction of bridges and culverts to the total length of 196 meters
24. Bangkok-Nakhon Pathom	Complete 21% works on the concrete bridges of 237 meters total length
25. U pa-Don Chedee	Construction of bridges and culverts to the total length of 35 meters

Bridges Built on Routes:	Work Schedules for 1968
26. Bangkok-Bang pakong	Construction of bridges and culverts to the total length of 91 meters
27. Panom sarakarm-Prachin Buri	Construction of bridges and culverts to the total length of 77 meters
28. Khok Samron-Chaibadarn-Buachoom	Construction of bridges and culverts to the total length of 147 meters
29. Ban Pong-Kanchonaburi	Construction of bridges and culverts to the total length of 102 meters
30. Hin kong-Barn pachee	Construction of bridges and culverts to the total length of 190 meters
31. Nakhon Si Thammarat-Pak Phanang	Construction of 61 meters of bridges
32. Krabi-Ranong	Complete 49% work on 370 meters length of bridges
33. Huay yod-Krabi	Construction of bridges and culverts to the total length of 62 meters
34. Phatthalung-Trang	Construction of bridges and culverts to the total length of 32 meters
35. Ta noon-Takua pa	Construction of bridges and culverts to the total length of 40 meters
36. Concrete Filling for Bridge Approaches	Concrete filling for Bridge Approaches for 10 major routes and 57 minor routes.

6.3 Procurement of Highway Construction Equipment and Machines.

Mechanical equipment and car-accessories as well as machines needed for highway construction and development works are 51 jeeps, 11 small buses, 56 graders, 12 water sprinkler trucks, and various other construction materials.

6.4 Provincial Highways.

The following are projects for development and construction of provincial highways:

Routes to be operated on	Work Schedules for 1968
1. Payao-Dok kam tai-Chiangkam	Construction of 15 kms. of roadway, and 180 meters of bridges
2. Lampang-Chae Hom-Wang Nua	Construction of 10 kms. roadway, and 267 meters of bridges
3. Nan-Bua-Toong-chang	Construction of an 8 kms. roadway
4. Utaitaree-Nong chang-Ban rai	9 kms. work on the raising of the road's sub-base
5 Doi Saket-Mae Suay	Construction of an 8 kms. roadway
6. Kushinarai-See Nong Wang	10 kms. work on levelling and laterite laying as well as construction of bridges to 66 meters length
7. Payu-Koor Harn	Construction of 10 kms. of road way, and 66 meters of bridges
8. Surin-Sangka	8 kms. work on way level elevation and expansion of the upper section; laterite laying works on the entire 51 kms. route

Routes to be operated on:	Work Schedules for 1968
9. Buri Ram - Phutthaisong	Grading works and laterite laying on 6 kms.; and construction of concrete reinforced bridges to an 80 m. length
10. Utomporn Pisai-Rasee Slai - Mahachanachai	Way level elevation on 3 kms. and construction of concrete reinforced bridge to 250 m. length.
11. Tart noi - Na nua	Construction of 1 12 kms. road.
12. Loei-Thai Li - Pang Huay	Construction of 1 10 kms. road.
13. Sing Buri - Tha Karm-Kai Bang Rachan	Construction of 2 kms. roadway, and 100 meters bridges.
14. Pho paya - Ang Tong - Ta Rua	Construction of 2 kms. roadway, and 146 meters of bridge.
15. Rangsit-Nakhon Nayok	Asphalt paving on 14 kms. and bridge construction for 162 m. length.
16. Pathum Thani - Sam Khok	Asphalt paving on 3 kms., expansion of road shoulders by 8 kms. (the whole route).
17. Pathum Thani - Lat Lum Kaeo	Asphalt paving of 3 kms. and construction of bridge for 120 meters.
18. Ta Rua - Ta Larn	Asphalt paving of 5.5 kms.
19. Crossroad leading to Amphoe Barn More.	Asphalt paving of 1.98 kms.
20. Prachin Buri - Srimahapho - Surinwong	Construction 5 kms. of roadwork and culverts.
21. Rayong - Ban Khai	Asphalt paving of 5 kms. and bridge construction of 26 meters.
22. Supan Buri - Paknam	Construction of roadway for 8 kms.
23. Kao Noi - Pran Estaucy	Asphalt paving for 5 kms.
24. Sri Prachan - Don Chedee	Grading work on parts of the road, and work to increase the thickness of the entire road.
25. Phetchaburi - Ban Lat	Asphalt paving of 2.5 kms.
26. Kao Ngu - Ban Pong	Construction of 3 kms. roadway, and 50 meters of bridges.
27. Narathivat - Sugai Kolok - Waeng-frontier	Asphalt paving of 13 kms. and construction of 50 meters of bridges.
28. Narathivat - Tark Bai	Construction of 10 kms. roadway.
29. Petkasem - Khao Chaison	Construction of 3 kms. roadway.
30. Khao Daeng - Sting Phra - Ranote	Construction of 6 kms. roadway.
31. Tap Pood - Tha Rai	Construction of 2 kms. roadway, and 30 meters of bridges.
32. Nakhon Si Thammarat - Chiang Yai - Hua Sai	Construction of 6 kms. roadway, and 150 meters of bridges.

6.5 Project for the Mechanical Equipment Center will be developed as follows:

Mechanical Equipment Center at Khon Kaen. Work on road base, and 8 kms. of asphalt paving on the Kosum Pisai-Maha Sarakam route; earthwork and basework on 31 kms of the Yangtalad-Krauan route; and on 10 kms. of the Yangtalad-Pone tong-Sevapud route as well as 130 m. of bridge construction on this route.

Mechanical Equipment Center at Maha Sarakam. Following works to be carried out on the Borabu - Buri Ram route: 25 kms. of earthwork, 30 kms. of asphalt paving, and 170 m. of bridge and culvert construction.

Mechanical Equipment Center at Songkhla. Following works to be carried out on the Songkhla Chana - Na Tavee route: 15.517 kms. of earthwork, 19,517 kms. of asphalt paving, and 852 ms. of culvert construction.

6.6 In addition to the above, work will be carried out in 1968 on 30 non-project routes and roads constructed by the Irrigation Department, most of which will involve grade levelling work, as well as laterite laying on the total distance of approximate 36 kms.

7. Department of Public Relations

7.1 Project for the Expansion of Television Services thorughout the Country.

Survey and final engineering planning for the consturction of a television station in Yala & arrangement for land purchase in Bangkok towards the establishment of a T.V. Switching Center to be built in 1968 are underway, while a microwave system will be used to relay television transmission from the center in Bangkok to various points in the country.

8. Ministry of Interior

8.1 Interior Ministry's Telecommunication Program, including

Installation of telecommunication equipment and apparatus, with construction of additional stations as well as training of officers in various branches of the telecommunication system.

9. The State Railway of Thailand.

9.1 Improvement and Expansions of the Lines Already Opened for Use.

Programs are visualized for procurement of 78 diesel locomotives, 28 sets of diesel railcars, 15 shunting locomotives with construction of 435 freight cars and 1968 wheel chasis. Improvement will also be made on 40 bridges to increase their load capacity to 15 tons, with construction of concrete reinforced bridges, as well as levelling work on the bridge neck at Rama 6 Bridge, on the Bangkok side. Procurement of 38,000 railroad sleepers, will be made besides replacement of 50 lbs/yard rails by 80 lbs/yd rails on 200 kms. of the Southern line; replacement of 60 lbs/yd rails by 80 lbs/yd rails on 75 kms of the North-Eastern line; replacement of 8 signal and inter-locking equipment; improvement of 11 kms of rail lines between Nakhon Pathom and Phetchaburi, purchase of 30 hopper cars equipped with BV and ballast grader; expansion and increase of crossings in 22 stations; expansion of station-grounds in four major stations, and two medium stations; purchase of two sets of telecommunication equipment, and improvement of 48 operation buildings.

9.2 Improvement on the Me Klong Line.

Expansion by 133 m. of crossings at the Bang Nam Jeud Station; 72 m. at the Barn Bor station; 71 m. at the Bang Kalong Station; 47 m at the Barn Nakoke Station; 64 m. at the Lard Yai Station. Ground improvement will also be made on the line from Wong Wien Yai - Mahachai, and on the Barn Lam - Me Klong Line; with construction also of eight additional stations.

9.3 Project for the Survey and Construction of New Lines.

Following additional surveys, or new surveys will be made to improve former lines:

Denchai - Chieng Rai and the Nong Pladuk - Suphan Buri line to raise it to regular standards.

9.4 Project for the Construction of the Kangkoi - Bua Yai Line.

This includes installation of communication equipment as well as completion of land appropriations which are presently under negotiation.

10. Express Transportation Organization (ETO)

10.1 Project for the Replacement and Increase of Trucks

Purchase will be made of one hundred 10-ton trucks to replace 50 old ones, and thus make an increase of 50 new trucks.

10.2 Project for the Purchase of Buses

Purchase of an additional 50 buses to replace old ones.

10.3 Project for the Assembly and Use of the Low Bed Trailers

Purchase of 5 low bed trailers of 30-ton load capacity.

11 The Radio Aviation Company of Thailand

11.1 Air Communication and Air Traffic Control Projects

This covers procurement of equipment and apparatus for radio communication purposes with Prom Pehr; expansion of radio services at Sattaheep; procurement of RF transmitter and receptor radio and recording equipment; air traffic control; procurement of teletype words correction machine for the Manila and Calcutta circuits; procurement of microwave type-setter equipment; procurement of tape transmitter, model M 28, and procurement of maintenance and regular equipment of the workshop.

12. Telephone Organization of Thailand

12.1 Project for the Expansion of the Metropolitan Telephone Services

Priority will be given to construction of offices and construction of the second Wat Liab Junction, with 30,000 numbers capacity; the Bang Na Junction with 10,000/20,000 numbers capacity, Bang Sue Junction with 10,000/20,000 numbers capacity; Don Muang Junction with 5,000/10,000 numbers capacity; and Bang Khen Junction with 10,000/20,000 numbers capacity.

12.2 Project for the Third Extension and Improvement of Provincial Telephone Services

Procurement of land for the construction of telephone junctions at Ang Tong, Swankaloke, Barn Bueng, Bang San, Chumpae, Mukdaharn, Amnartcharoen, Khok Samrong, Kamphaeng Phet, Bangmoannark, Taparnhin, Phichit, Denchai, Nan, Mae Sot, Mae Hong Son, Payao, Sampran, Photharam, Pangnga, and Krabi. Construction of junction building will also be made at Kalasin, Nongkai, Pet, Buakai, Kang-khoi, Ranong, and Phra Buddho Baht, while improvements will be made at the Ayuddhaya, Khon Kaen and Phuket Junctions. Purchases will also be made of 7,000 automatic telephones, and 8,000 of models C B while labor-saving machines and other equipment will also be provided for operation of the telephone branches and junctions.

12.3 Project for Long-Distance Call Services

Surveys and purchase of land will be made for the purpose of constructing 30 signal relay stations, at Roi-Et, Yasothorn, Chumpae, Muangsamsib, Pukao Kong, Nong Tomdee, Barn Huay Teuy, Barn Nong Sang, Mukdaharn, Seylapoomi, Amnartcharoen, Barn Samdee Mee, Barn Tasala, Barn Wang Knai, Nong Harn, Wat Pa, Barn Hua Bueng Ta, Sukhotai, Barn Klong Pradoo, Kampaeng Phet, Kaohinloo, Ranong, Barn Klong-Kae, Pang Gran, Kao Kai, Kao Wang Chao, Taparn Hin, Kao Fashee, Klong Mai Farg, and Kao Barn Bang Koot. Purchases will also be made of Tir Cables of 25 x 19 m for the length of 40,000 meters, and also for Line Materials and Splicing Kit equipment.

13. The Port Authority of Thailand

13.1 Development Work and Construction of Warehouses, Office buildings, Roads and Others.

Construction of transit goods warehouses, military equipment warehouses as well as the construction of other warehouses will be completed on schedule, while another 280 square meters of extension made to the warehouses behind the temporary holding warehouses. Another 6,000 sq., meters of outdoor goods stocking areas will be made, and expansion and improvement made on roads, with further extension of the rail line to the new warehouse. Five additional temporary holding warehouses will be made, with improvement and extension of buoys in the river and navigation channels of the Chao Phaya, one crocodile-jaw dredger, bull dozer dredger, two carriers, and one trawling vessel will also be procured.

13.2 Procurement of Goods Lifting and Transporting Equipment and Equipment for Other Work.

This program includes the construction of 20,000 pallets; purchase of eight 5,000 lbs. lift trucks, forty 7,000 lbs. lift trucks, four 10,000 lift trucks, 44 trucks, four 30-ton mobile cranes, four 10-ton mobile cranes, and four 5-ton mobile cranes, 16 trawlers, 30 trailers, complete with two trawlers, lift-dump truck, caterpillar bull dozer, one road roller, and also the purchase of other equipment.

13.3 Project for the Construction of Midstream Dolphins, which visualizes

The construction of 30 midstream dolphins.

13.4 Project for the Construction of Wharfs on the East Coast.

This program will cover bidding work and demolition work in the ground where six additional wharfs are to be located.

14. Thai Maritime Navigation Company

14.1 Projects for the Development of Sea Transportation, which cover

Cooperation with experts to draft Thailand's marine commercial development projects, as well as preparations made to receive bids for the purchase of two sea going vessels, one of which will be of 8,000 tons capacity, for use on the Bangkok-Japan route, and the other of 13,500 tons capacity for use on the Bangkok-Europe route.

15. Transportation Co Ltd.

15.1 Project for the Procurement of Buses, which will include the purchase of 44 new buses to replace 20 old ones to make an increase of 24 new buses.

16. Thai Airways Company.

16.1 Project for the Purchase of Additional New Model Planes

There will be the purchase of three commercial planes model HS 744 Series 2 (Avro) produced by England's Hawker Siddeley Aviation Company which are 40-62 seat planes.

It is estimated that the economic development of the communication and transportation sectors will require an investment of about 3,641.12 million Baht, of which

1,818.85 million Baht will be met by allocations in the National Budget, 906.89 million Baht by foreign loans, 48.62 million Baht by foreign aid, and 866.76 by the incomes of these state enterprises themselves. When this sum is compared to the amount estimated in the original NESD Plan, which is 3,860.88 million Baht (2,089.02 million Baht to be met by allocation of the National Budget, 1,071.81 million by foreign loans, 280.00 million by foreign aid, and 420.05 million by the incomes of these state enterprises) a difference of 219.76 million Baht less in the actual expenditure is seen which can be attributed to the changes made to keep pace with work already achieved in 1967, and to measures introduced to keep in line with capacities of the agencies concerned so that the ultimate aims of the Plan would be finally achieved.

These various revised plants will form the main basis and guideline for future work of other projects as well as to insure their success. It is also estimated that work in the latter stages of various projects could be carried out at a quicker pace.

Power

Satisfactory Progress has been made in this branch of work during the past year which can be summarized as follows:

1. Development of the Generator Systems

The NESD Plan goals have been successfully realized in that the installation of the third electrical generator of 70,000 kw capacity at the Bhumipol Dam was completed in May, while the 4th of the same capacity was completed in August 1967, making an increase of 140,000 kws. generating capacity in the Yanhee Electricity systems to meet the rapidly increasing demands of the public. Work carried out in the North-East and South have achieved the goals set up by the NESD Plan in that work was started on the installation of a 8,300 kw. electricity generator at Nam Pong Dam, and the third steam electricity generator of 20,000 kw. capacity at the Krabi Lignite Plant, which are expected to be completed in 1968.

2. Development of the Distribution System

To insure that work on the distribution systems fall in line with the generating systems of 1967 as mentioned above, the Metropolitan Electricity Board has extended work on the distribution systems for Bangkok-Thon Buri, and neighboring provinces, by the construction of one switching station, one sub-station, change of revamp motor transformer in one station, installation of equipment in three sub-stations, installation of 12 kv. distribution line for a 50 km distance. Preparations are also being made for construction work next year by the purchase of land and equipment.

As far as electricity development in the provinces is concerned, every project for the construction and improvement of the generating system of the Provincial Electricity Board has been met with delays over loan negotiations and the orders of necessary equipment abroad, so that work on the various projects has been held up. However, while waiting for the foreign loans, the Provincial Electricity Board has been authorized to make loans from the Ministry of Finance and the counterpart funds of that particular project so that work on the construction and improvement of distribution systems could be done as temporary measures to enable electricity distribution to the public for the present. These measures cover various projects such as the second stage for construction and improvement of the distribution system within the Yanhee Zone; construction and improvement of the distribution system within the Nam Pong Zone. Projects under foreign loans which are being temporarily met by loans from the Ministry of Finance are for construction and improvement of the distribution system in Krabi.

Projects for 1968

Main power development projects could be classified as follows:

1. Development of the Generation System

1.1 The Lam Dome Noi Project, in Ubon Ratchathani. The program includes the construction of a multipurpose dam to produce about 22,000 kw. of hydro-electric power as well as to provide irrigation benefits for approximately 150,000 rai of farms. Preparation work at primary stages will be done in 1968, with surface work over the area where the dam is to be constructed, as well as road construction to and within the headwork areas. Surveys on the rights and ownership of land in the reservoir area will be made as well as surveys on the land where those evacuated from the reservoir area are to be settled in the future.

1.2 Third Stage of the Yan Hee Project construction work on the installation of the high tension 230 kv Bangkok tie line, and installation of the Synchronous Condenser at the Bangkok Noi sub-station, as well as work on the installation of a high-tension 115 kv. distribution line to other provinces, which is a continuation of works carried out in 1967.

1.3 Fourth Stage of the Yan Hee Project. work on the installation of the 5th and 6th 70,000 kw hydro-electric generators and the 3rd steam electricity generator of 87,500 kw capacity at the North Bangkok locomotive shed station, with installation of the third high-tension 230 kv distribution line for Bhumipol Dam - Bangkok, and the fourth for Nakhon Sawan - Bangkok, as well as continuing the work of 1967 on the relay station.

1.4 The Nan Project. (first stages), Uttaradit. Basic preparations for the construction and installation of two 80,000 kilowatt hydro-electric generators at the Phasom Dam, and installation of 115 kv high-tension cable lines from the Dam to Uttaradit.

1.5 South Bangkok Thermal Plant, (first stage). Basic preparations for the construction of the first thermal electricity plant of 80,000 kilowatt capacity, and two 15,000 kilowatt gas-turbine electricity generators at the South Bangkok Thermal Plant, by carrying out primary construction work, earthwork construction of a 5 km. road to the headwork as well as making construction designs and preparations.

1.6 Project for the Installation of the High-Tension 115 kv Distribution line of Ang Thong - Nakhon Ratchasima covers.

Work for the installation of the 115 kv. high-tension cable line to link the Yanhee electricity system with that of the North East, from Ang Thong to Nakhon Ratchasima for approximately 200 kms.

1.7 Project for the Installation of the Third Electricity Generator at Ubolratana Dam.

The work of 1967 continued by the completion of installation of the 8,300 kilowatt hydro-electric generator at Ubolratana, Khon Kaen.

1.8 Project for the Installation of the Third Electricity Generator at the Lignite Electricity Plant at Krabi.

Work continued to finish the installation of the third 20,000 kilowatt steam electricity generator made in 1967.

1.9 Project of the hydro-energy plant at Mae Hong Son.

Work on the construction of a concrete irrigation weir, distribution tunnels, and an 800 kilowatt power plant together with distribution cables to Mae Hong Son to provides regular supply of electricity for daily consumption at a low rate.

1.10 Project for the Nakhon Ratchasima Turbine Plant. Installation of a 15 megawatt turbine generator at Korat (Nakhon Ratchasima) to meet the highest demands of electricity within the zone of the North East Electricity Board operations.

2. Development of the Distribution System.

2.1 Expansion of the Distribution System in the Metropolitan Electricity Board Zone.

Work continued from 1967, in the construction of one distributor station two sub-stations, with improvement and enlargement of the transfer motors transformer at two stations, installation of 69 kv. distribution cables for a 22-km. distance, and of 12 kv. feeder cables for a 45 kms. distance.

2.2 Project for the Construction and Improvement of the Distribution System in the Yanhee Zone, (first stage). remaining work on construction and improvement of the distribution system for the Yanhee zone are as follows:

1)	high-tension cable lines	
	erection of poles	55 kms.
	cable lining	80 kms.
2)	low-tension cable lines	
	erection of poles	80 kms.
	cable lining	100 kms.

3) Installation of 12 sets of switch gears at the relay station, establishment of 8 main radio stations, and 30 sub-stations, as well as completion of the installation of ground cable protectors and others on schedule.

2.3 Project for the Construction and Improvement of the Distribution System in the Yanhee zone, (second stage.)

1)	erection of poles and putting up the 22 kv cable lines	430 kms.
2)	22 kv. distribution system	124 kms.
3)	improvement of the 400/230 V distribution system	121 kms.
4)	installation of transformers	16,000 kva.

2.4 Project for the Construction and Improvement of the Distribution System for the Nam Pong Zone. Work on the installation of linking system for the high and low-tension distribution systems to be finished according to the following goals:

1)	22 kva. high-tension distribution cables	1,195 kms.
2)	400/230 V. distribution systems	392 kms.
3)	installation of transformers	27,740 kms.

2.5 Project for the Construction and Improvement of the Distribution System for the Krabi Zone. Work on the linking and distribution system continued from 1967 is as follows:

1)	22 kv. high-tension cable lines	211 kms.
2)	400/230 V. low-tension cable lines	45 kms.
3)	installation of transformers	5,622 kva.

2.6 Electricity Development Project

This covers the construction of 30 electricity plants in various amphoe, sub-amphoes and public-health zones which do not receive any electricity supply as yet from the other various projects.

Most of the goals for power development were successfully realized after one year's operation of the National Economic and Social Development Plan, but as there is a rapidly increasing demand for electricity, certain adjustments and revisions have to be made in some programs, by accelerating construction work on projects already visualized by the the NESD Plan as well as by the addition of new projects to meet the increasing demands of electricity as above mentioned. Such work includes: acceleration of construction work, or installation of the 5th and 6th generators at the Bhumiphol Dam, and installation of the 3rd steam-generator at the North Bangkok Thermal Plant. The Yanhee Electricity Board also sees the necessity to make advance preparations for the construction of an atomic energy plant, and has made a contract with the Burns and Koe Company to make a survey and a feasibility report in 1968.

For the South on the other hand, the Krabi Lignite Electricity Plant can still produce enough electricity supply to meet the public demands, so there are no new additional projects for this part, although the sub-committee Electricity Study and Planning Administrative Committee is presently making a study and preparations for the creation of a Master Plan to develop the generating and distribution systems for the South by the Lignite authority.

As far as the distribution system is concerned, the Metropolitan Electricity Board has made adjustments and further addition to their work schedules for the Bangkok-Thon Buri and neighboring provinces area to keep the distribution system in line with the generation system progress. This work is mostly financed by the Metropolitan Electricity Board's own income.

Economic Development Work in Private Sectors.

Thailand is a country with a free economic system so that most of the country's economic activities are not under the direct control of the government, and are placed under the private sector. Any economic development planning is not complete without the combination of economic developments for both government and private sectors, but the first National and Social Development Plan gave consideration only to the government sector, while the second phase of adjustments made in the first NESD Plan (1964-1966) which extended the scope of the Plan by including development programs for both governmental enterprises and local administrative bodies, has not included any development program for the private sector.

The second NESD Plan, therefore, has been made more complete, not only in giving consideration to various state projects for the development of various sectors, but also by including and emphasizing the importance of the development of the private sector, particularly the roles played by private bodies in the industrial, commercial and other services developments. At the same time, closer relations are encouraged between the government and private organizations.

Great progress has been made in the economic development of the private sector in 1967, through the initiation of new projects, and improvement of existing activities which can be summarized as follows.

1. Appointment of a Private Sector Economic Development Committee

The cabinet appointed a Private Sector Economic Development Committee on May 30, 1967, composed of a total of 27 representative of the various governmental bodies and private enterprises under the chairmanship of the National Economic Development Board Executive Chairman. Their duties will be to draw up a long-term plan for economic development of the private sector which will be considered as part of the NESD Plan, while attention and recommendations must be made on any particular case where there are problems to be solved in the economic activities of the private sector. Three sub-committees have already been appointed for administrative purposes which are, a sub-committee for the private industrial development, a sub-committee for the development of private monetary institutions, and lastly, a sub-committee for the development of private agricultura and commercial industries.

2. Organization of a Private Planning Unit.

According to the NEDB's new work distribution, a private planning unit has been set up within the Economic and Social Planning Division, to provide various services to the Private Sector Economic Development Committee as well as to the three sub-committees, ranging from invitations to join conferences, to information on the research on the industrial situation, or any specific economic activities. The unit will also draw up recommendations for policy submission on industrial development and goals, and will study the various factors of relations between different economic branches and private investments as a whole, with measures introduced to bring the State and private investors into closer co-operation.

3. Work Performed and to be carried out.

Work carried out in the private economic development programs so far includes consultative meetings, introduction of measures and policies for economic development made between governmental bodies and private firms to obtain economic development and co-operation in both governmental and private sectors. As a result representatives of both the government and private industries have had a chance to work together closely in the introduction of measures and policies for the economic development of the country as a whole.

As far as economic development in the private industrial sector is concerned, meetings and conferences have been held to study the work already accomplished, presently in progress and future goals of various industries so as to set a production target in accordance with productive capacity, domestic demands, and export potentials. Other policies and recommendations and various industrial measures will also be made on each particular industry as well as for industry as a whole

Economic development of monetary institutions has resulted in the promotion and encouragement of various financial institutions, particularly to commercial banks so that they would play a larger part in the financial savings, the establishment of banks for agricultural and cooperatives promotion, insurance businesses, the IFCT, and other financial institutions. Present and prospective activities include the study of various problems of capital markets, and the capital institutions to be established; while policies and measures will be introduced to stimulate capital formation in the private sector in order to expand private investments.

As far as economic development in the private agricultural and commercial sector is concerned, meetings and conferences have been held to set up a private economic development plan for agriculture and commerce based on priority of the subject's value and effects on economic development of the product, so that individual policy can be recommended and specific measures introduced on each matter or product, as well as for production as a whole, such as the recommendation of policies and measures to solve the gunny bag production problem.

Activities presently underway, and to be continued, include the study of various problems: policy-making, introduction of basic standards, promotional work, targets set for jute production, and by-product industries of jute, maize, and sorghum, as well as of fruits, vegetables and all plants and other connected problems, which would all help to expand private agriculture and commercial activities.

CHAPTER SIX

SOCIAL DEVELOPMENT PROJECTS

Social development work outlined in the second NESD Plan consists of development work in four major sectors: social, public utilities, public health and education.

Social Development

Social development projects for 1968 form part of the second NESD plan. Its schedule has been adjusted to fall in line with the present economic situation and work potentiatilites of the government bodies concerned after the results achieved in 1967, the first year of the Plan, have been taken into account to serve as a base.

As far as the work scheduled in various projects for 1967 is concerned, certain main projects have been carried out as planned, such as the Community Development Project and the project for land allocation and self-help communities. On community development work, the area of operation has been extended in the North-East and the border provinces in the South, while various measures have been introduced to keep up with projects for accelerated rural development in these areas

Work on the development of self-help communities has established 45 Self-help communities in various regions, as the continuation for work already started in the first NESD Plan, [illegible] land has been allocated for further settlement. A clean hygienic water supply [illegible] and other uses in rural villages is being provided by the Public Health, Mine[illegible] the Public and Municipal Works Department as well as by various regio[illegible] would achieve the [illegible] set out in the Plan

Work on the construction [illegible] will [illegible] blocks of residen[illegible] in the [illegible] the fourth [illegible] is scheduled to be [illegible] March 1968

Certain projects, however, [illegible] such as [illegible] projects in develop[illegible] this a[illegible] but on which nothing has been done so far, the project [illegible] welfare centers aimed particularly at opening new cen[illegible] of w[illegible] has not been started, while most proje[illegible] for the develope[illegible] were not incorporated in the second NESD Plan, and have, therefore, to [illegible] luded in the Plan for 1968. The delay in implementing these projects can be mainly attributed to the lack of preparations, budget reductions, and delays in administration as well as in the carrying out of the work.

Projects for 1968

For the reasons given above, it is necessary, that work plans for these Projects be somewhat revised to produce greater efficiency. Social development work for 1968 which has been revised and adjusted is given in summary as follows:

1. Land Allocations, and Self-Help Settlements.

1.1 To open a new self-help community, "the Self-help community at Toong sarn, in Pitsanuloke"; work on the planning of living quarters, markets, shopping centers, public service, irrigation canals, road and bridge constructions, and provision of labour-saving machines.

1.2 To change the status of the community to which people were evacuated from inundated areas north of Bhumipol Dam, in Ampur Hod, Chiang Mai and where they have been living for the last three years, into that of a self-help community.

1.3 Surveys, land measurements, allocations, bridge constructions, establishment of services and public utilities in the special self-help communities established for the assistance of people evacuated from inundated areas as the result of the construction of irrigation projects at Lam Nam Pao, Lam Nai Nan, Lam Takong, and Ubolrat Dam.

1.4 Evacuation of 4,000 families from various regions, allocations and surveys of land measuring 72,000 rai for the self-help communities in the South.

1.5 To allocate land for the self-help communities in general so as to accommodate 1,000 more families, on a total area of 25,000 rai.

1.6 Improvement of work in the self-help land settlements in aid of hill-tribes, by the building of a pilot-village, research, and establishment of 11 mobile hill-tribe assistance units. Hill-tribe development center will be set up in the province of Mae Hongsorn, with branches in five amphoe of five differentprovinces, to aid about 20,000 - 25,000 members of hill-tribes.

1.7 The Land Department will survey land for allocation to people in eight provinces, and will allocate over 74,000 rai of land to people in the Provinces of Loei, Sakon Nakhon Nakhon Phanom, Lamphun, Nan and Udorn Thani on which 3,200 families will settle

1.8 Aerial photographs to be taken of 3,125,000 rai of land, or approximately 5,000 square kilometres.

2. Social Welfare.

2.1 Work for child and youth welfare will involve the opening of one child-welfare center in Nong Khai, to accommodate 100 children, and the center is to be expanded to accommodate another 50 abandoned infants.

2.2 Improvement and development of living quarters, a vocational training center, nursing homes and the establishment of an occupation promotion center for the aged, disabled, destitute, and unemployed women to accommodate 625.

2.3 A home for mental patients will be established to house patients for whom the treatment at the hospital has proved successful but who have no relations or have been abandoned. The home will provide living quarters, occupational training, and occupational therapy. It is estimated that this year the home will be able to accommodate 100 persons.

2.4 Housing projects for the assistance of low-income families, will involve construction of 12 more blocks of flats accommodating 912 families at Dindang Road, Bangkok.

3. Community Development.

3.1 Twenty more development zones at amphoe level and promotion of public building constructions will be opened in 19 provinces, covering 20 amphoes, 160 tambols, and 1,602 villages.

3.2 Training given to local leaders from 20 amphoes from various regions is to be increased to cater for another 10,000 persons.

3.3 Demonstrations and training will be given to encourage people to make full use of their spare time, by establishing 90 occupational groups in the development zones of 80 amphoes.

3.4 Additional Technical Assistance Community Development Centers will be opened at Amphoe Sri Racha, in the Province of Chon Buri, and in Lampang.

3.5 100 volunteers will be accepted for service in various provinces for a period of one year.

4. Labor Force.

4.1 Training will be given to raise the skills of 1,014 people. Registration will be introduced for skilled workers, and vocational graduates. Vocational-training buildings will be constructed, while training will be given to 140 managers, 146 foremen, and 220 employees.

4.2 On the side of labor relations 120 inspections of the women and children in the labor force will be carried out, while there will be 4,000 inspections of the general labor force, as well as studies made on the trends of working conditions.

4.3 Set up a plan to survey ten villages as to the disguised unemployment in the agricultural sector.

Public Utilities.

The main projects for public utility development include, a project for the improvement and construction of a drainage system for Bangkok and Thon Buri. Camp Dresser and McKee of the U.S.A. were awarded the contract to carry out a survey in September 1966. The Survey and the design for the sewerage system and the prevention of floods in the Bangkok-Thon Buri area on a joint plan for the municipal areas of the two provinces are underway and it is expected that such surveys and planning will be completed by March 1968 on contract schedule, and that the construction work will be begin within the period of this second NESD Plan.

As far as the development on waterworks for an increased water supply for Bangkok and Thon Buri is concerned, selection of an engineering firm to carry out the surveys and development planning for the Metropolitan Water Board to meet the long-term demands are under way, and it is expected that such selection will be made by November 1967.

The Cabinet has approved the Metropolitan Waterwork Act which had been revised by the Juridical Committee for the merging of the waterworks boards for Bangkok, Thon Buri, Nonthaburi, and Samut Prakarn under that of the Metropolitan Waterworks, which would be administered under the form of a state enterprise under the Ministry of Interior, so that the waterworks services could be provided more promptly, with adequate supply to meet future public demand.

Surveys and primary designs have been made for the construction of a bridge across the Chao Phraya at Ta Chang Wang Na, which is one of the two bridges scheduled to be built during the phase of the second NESD Plan, although changes have been made in the original design in that a 6-lane way will be substituted for the 4-lane formerly planed so as to be more suitable for the future flow of traffic. Japan is interested in giving technical assistance, making surveys, designs, and detailed planning, while appropriation of land at the sites for construction purposes are also underway.

1968 Projects.

Most of the projects for public utility development are the continuation of work carried out in 1967. There are new projects however which have not been included within the NESD Plan for 1968, namely, the project for the installation of an electric water pump, the project for land development of Toongmahew in Ubon, under the Local Administration Department, the project for the construction of a bridge across the Chao Phraya at Ta Chang Wang Na, and the project to increase the supply and distribution of water within the Municipal areas of Bangkok, Thon Buri, Nonthaburi and Samut Prakan under the Public and Municipal Works Department. Besides these, projects which have not been incorporated in the NESD Plan include that for the development of human resources and equipment, under the Town-planning Bureau, etc. Otherwise, the projects are the continuation of work started in 1967.

There is not much difference in the National Budget figure, and that specified in the NESD Plan, except for the addition of new projects which have thus increased the figure for the National Budget expenditures.

1. The Municipality of Bangkok.

1.1 Bangkok-Thon Buri road programs, construction and improvements will be made on the following routes:

1.1 (1) Arun-ammarind Road, from the Wong Wien Lek to Prarn nok. The extent from Wong Wien Lek to the former Arun-amarind Road will be new construction, beyond which the road will be repaired to enable a link between Wong Wien Lek and Pran nok to ease traffic on Issaraparb Road, and which will be part of the internal circuit linking with the Charal Snidwong Road running along the Chao Phraya, as planned by the experts (Litchfield Company).

1.1 (2) Expansion and improvement of Trok Chan, Saint Loius 3, Soi Suan Plu, and Soi Linchee. Expansion and improvement will be made on these roads to ease the traffic on the New Road. This project started in 1966.

1.1 (3) Rajvithee Road. Continuation of 1967 work with improvement from Samsen road- Tuek Chai.

1.1 (4) Pitsanuloke Road. This will involve improvement and expansion of the road.

1.1 (5) A road running along the Chao Phraya, from New Road at the Bangkok Bridge junction, south-eastward about 300 meters from the river, along the banks to Rama IV Road, in the vicinity of the Klong Toey Dock. The new road will not only develop this area, as it cannot be reached by road at present, but will also reduce the traffic on the New Road as well.

1.1 (6) The Din Dang New Extension, continue eastward from the Din Dang

road parellel to the Samsen Canal, cutting across the canal to be linked with Soi Asoke leading to the Petburi Extension and Sukhumvit.

1.2 Project for the Design of a Drainage System.

At present, an engineering consultant firm is being hired to make a Master Plan for the drainage system for the Metropolis, which will be completed in March 1968 according to the contract. It is also expected that the consultant engineering firm will be hired further to do the third phase of work, the construction designs and detailed planning in the areas of operation, which is the area encircled by the Padung Krung Kasem Canal, and the Chao Phraya River, including the area around the Jitlada Palace and the Government House.

1.3 Project for the Construction of the Drainage System.

Work started on the laying of drainage pipes along the repaired roads, and laying of drainage pipes from Rama IV road to the Chao Phraya River, as well as construction of a small trial sewage pumping and eliminating plant at Chong Nonsee. Land will be appropriated around the vicinity of Chong Nonsee in accordance with the Land Appropriation Act.

2. Department of Town and Country Planning.

2.1 Development Projects.

2.1 (1) Over all towr-planning surveys will be made in six provinces, and in Bangkok and Thon Buri, making a total of seven locations to be surveyed. Over all town planning will also be made in 13 places.

2.1 (2) Specific Town-planning will be made in 170 locations.

2.2 Town-development Projects.

2.2 (1) Enforcement of the bylaws on the overall town-planning to be introduced for two locations which will result in the land being used only for purposes specifically defined by the land bylaws, so that there will be more order in the construction of various kinds of buildings and their uses.

2.2 (2) Enforcement of the Bylaws on Specific Town-planning. This will be introduced in two locations, that is when the bylaws on overall town-planning have been issued, enforcement will follow in suitable areas, or in zones where circumstances have necessitated the enforcement of this bylaw such as sites burnt down, so that effective results of the overall town-planning bylaws can be achieved.

3. Department of Public and Municipal Works.

3.1 Project for the Construction of a Bridge Across the Chao Phraya, will proceed with land appropriation for the construction of the roads and bridge.

3.2 Project to increase Water Supply and Distribution in the Municipal Areas of Bangkok, Thon Buri, Nonthaburi, and Samut Prakan.

3.2 (1) To increase water supply and distribution for Bangkok and Nonthaburi

3.2 (2) To increase water supply and distribution for Thon Buri.

3.2 (3) To increase the water supply and distribution for Samut Prakan.

The above three sub-projects are to be postponed for the present as the Committee and the sub-committees are now selecting and negotiating contract to hire a consultant engineering firm to make study and advise on a plan to prevent water shortage in the municipal areas of Bangkok, Thon Buri, Nonthaburi, and Samut Prakan.

3.3 The Provincial Water Supply Project. Production capacity of water supply will be increased in 22 provinces, as well as construction of new waterworks buildings in 12 others.

3.4 Project to Supply Clean Water in Rural Areas. (former projects to drill artesian wells). 130 artesian wells will be drilled, and two drilling rigs will be purchased.

4. The Department of Local Administration

4.1 People 's irrigation Projects The Committee of this Project has not as yet completed its planning work.

4.2 Local highways project, will be carried out as follows:

4.2 (1) Training of officers and the establishment of training centers as deemed necessary.

4.2 (2) Surveys and planning on provinces which the Administrative Committee of the Projects considers to have high priority.

4.2 (3) Purchase of equipment for provinces which will be chosen by the Administrative Committee of the Project.

4.3 Occupational Promotion Project, which is divided into the following seven sub-projects:

4.3 (1) Surveys on specific matters, and evaluation of results.

4.3 (2) Provision of water supplies and weirs.

4.3 (3) Promotion of two crops per year farming projects.

4.3 (4) Disease and Pest control and plantation methods.

4.3 (5) Private Capital counterpart formation.

4.3 (6) Training and Promotion work.

4 3 (7) Analytical work, and reseach on labor-saving machines.

These branches of work will be carried out as permanent projects over an approximate area of 100,000 rai, while about 400,000 rais will be devoted to the annual two crop farming program.

4.4 Project for the promotion of wheat plantation, composed of the following sub-projects:

4.4 (1) Experiment and Research on wheat plantation.

4.4 (2) Promotion of wheat plantation.

4.4 (3) Promotion of rice plantation and plantation of light glutinous rice.

Wheat plantation will be promoted in six provinces of the North covering approximately 1,800 rais.

4.5 Project to provide clean water supply for rural areas, of which the following measures will be taken :

4.5 (1) Provision of about 3,300 water-tanks.

4.5 (2) Construction of approx. 160 cement wells.

4.5 (3) Construction of ponds, small artificial lakes at 500 locations

4.5 (4) Construction of about 2,500 small wells.

4.6 Project for the Installation of Electric Water Pumps, will be carried out in 10 locations in Nong Khai (1), Roi Et (2), Kalasin (2), Sakon Nakhon (2) and Maha Sarakham (3).

4.7 Project of Land Develcpment at Toong Ma Hew, in Ubon., with an aim of introducing crops suitable to the soils, and advising farmers to grow them and to promote the use of correct fertilizers, so that the land will be used to its full capacity and produce the maximum yields. This land development project is composed of the following eight sub-projects ;

4.7 (1) Development of irrigation systems.

4.7 (2) Promotion of agricultural technical information for farmers in accordance with agricultural data.

4.7 (3) Surveys on economic and social conditions.

4.7 (4) Soil development and fertilization.

4.7 (5) Village-planning work, and construction of social and administration buildings.

4.7 (6) Establishment of a Private Irrigation Society.

4.7 (7) Administration work (purchase of labor-saving equipment)

4.7 (8) Land reigstration in the area of Toong Ma Hew.

Public Health

Work on public health matters in 1967 can be summarized as follows :

Expansion of central and provincial hospitals, which now number 84, to increase their services to the public. Expansion of central hospitals under the odimenistration of the Medical Department, namely the Women and Child Hospital, Lertsin Hospital, the Priests ' Hospital, Addicts' Hospital of Rangsit-Tanyalak has totalled 2,431 beds 158 doctors, and 501 nurses.

Additional buildings were constructed for hospitals in the provinces so that the total bed capacity of 9,924 of 1966 was increased to 10,237 by August 1967, with the increase of doctors and nurses from 600 and 1,500 respectively in 1966 to 636 and 1,655 respectively in 1967. There has also been an increase of doctors, nurses, and beds in the mental hospitals.

In addition to the expansion of work in public health bureaus, and development of village government health centers 14 additional first class government clinics have been set up, with an increase of 53 second-class clinics in various amphoes, while improvement has been made on midwifery units and increased the number by another 67 centers in 1967.

The Malaria eradication project is faced with problems of delays of DDT delivery which have caused the chemical spraying operations to fall behind schedules. Up to June, insecticide chemical had been sprayed in various areas comprising approximately 10,25 million inhabitants, Epidemic detection and surveys were carried out in various regions inhabited by 16.74 million people the infected of which were cured. Beside those found and cured by such investigations, measures were taken to detect and cure the infected in different other areas with the total population of 6 million.

1968 Projects

The Public Health project is divided into four main sectors : (1) prevention and disease control, and promotion of sanitation work, (2), medical care and services, (3), research and analytical work in medical sciences, and (4) the training of public health officers.

Work carried out in the public health sector for 1968 is in accordance with the goals outlined in the second NESD Plan (1967-1971). In sanitary development work, fight against various diseases of harmful consequence to the health of the people, and with great power to reduce productive capacity, such as malaria, tuberculosis, leprosy and others, have been carried out, while sanitary promotion was concentrated more on work in the provinces, the main work of which was the development of local sanitation, provision of a clean water supply, work on mother and child care, and promotion of nutrition work Emphasis will be made on the provincial hospitals to increase their bed capacities, to cope with number of patients while mobile medical units have been set up to be sent out to distant areas Work in mental health and neurological illnesses, medical reseach analysis, and postmortem examinations was expanded in that such work has been extended to provincial hospitals to promote research and analytical work there also.

The training of medical officers is of great importance in the development work for public health, and goals have been set for improvement in the teaching and training of nurses, nurses-aids, midwives, and medical science officers so as to increase their numbers according to the need.

Budget allocations for the development of public health matters in 1968 have been in accordance with projects and plans laid out in the second NESD Plan, The main projects are as follows

1. Office of the Under-Secretary of the Ministry of Health.

1.1 Project for the establishment of a Cancer Research Institute. Which includes continued construction of buildings and houses started last year for the examination of primary formation of cancer.

The budget for this project has been reduced a great deal as a result of the cutting down of the buildings from five to three stories. As the project was started one year later than planned, the cost of materials, and salaries had increased, and the project had to be postponed to the next year.

1.2 Malaria Eradication Project. This will be carried out according to the original plan but more officers will be appointed for the chemical spraying and survey works. The work schedules are as follows :

1.2 (1) Insecticide spraying to be made in areas where the infection still spreads, namely over an area of about 20 million inhabitants, and spraying operations to be made twice on frontier provinces, and newly cleared areas for agricultural purposes, and where there is active infection, or over a total area of about 11 million inhabitants.

1.2 (2) Survey on disease conditions in areas sprayed by insecticide to evaluate the results over an area of about 2 million inhabitants.

1.2 (3) Detection of people infected with malaria, followed with treatment in areas sprayed with insecticide of about 18.2 million inhabitants, including areas where such operations have already been stopped.

1.3 Project for the Development of Local Sanitation Works. Continuation of work by expansion operation areas to about another 2,700 villages. It is estimated that a clean water supply could be provided in 2,700 more places, while school waterworks could be arranged with the help of the people in 200 more places. Advice and help will be given to people on the construction of sanitary toilets, and sanitary living quarters for about 108,000 families.

1.4 Project for the Expansion of Sanitation Stations.

1.4 (1) Construction of 11 more first class sanitation stations, three of which will be in the accelerated rural development zones.

1.4 (2) Construction of 76 additional second-class sanitation stations.

1.4 (3) Improvement of three first-class sanitation stations, and 12 second-class stations.

1.5 Project for the Supply of Clean Water in Rural Areas. This will include the provision of clean water, and water pipeline for inhabitants of 50 areas ranking in priority in their need of a general water supply, as well as in 50 areas within the accelerated rural development zones, with the assistance of USOM.

2. Medical Department.

2.1 Project for the Improvement of Provincial Hospitals. Construction of buildings in 23 provincial hospitals to increase total-bed capacities by 1,040, out of which 600 will be for general patients, 100 for children, and 340 for childbirth cases.

Construction scheduled includes 45 houses for doctors-residences, five X-ray and operation buildings, five buildings for contagious diseases, one administrative building, one for pathology, and other miscellaneous buildings bringing the total to 15.

There will be also 40 additional positions for doctors and 430 positions for other officers.

2.2 Project for Nursing College, Midwifery and Sanitation School, and Nurse assistants Schools.

2.2 (1) To produce 40 nurse-instructors.

2.2 (2) To produce 290 more midwifery-nurses, and health officers.

2.2 (3) To produce 160 nurse assistants.

2.2 (4) To train 30 nurses in the examination on of diseases

To build one building for student nurses dormitory in the Nurses 's School in Korat Hospital and to improve and repair the Student nurses dormitory building at the Women 's Hospital.

2.3 Project for the improvement of Mental and Neurological Hospitals.

2.3 (1) An increase of 200 beds has been made in the four former mental hospitals, 50 beds added in the Hospital for the Mentally-Retarded, and 100 in the Clinic and Mental Research center in Chiang Mai.

2.3 (2) Establishment of a new mental hospital at Khon Kaen.

2.3 (3) Establishment of a mobile mental therapy unit, to serve people in Region 1-6.

2.3 (4) Construction of other miscellaneous buildings.

2.3 (5) To add 11 positions for doctors, and 116 positions for other officers.

3. The Medical Science Department.

3.1 Medical Research and Analysis. Research made on phramaceutical materials, by various medical scientific methods; research on the real causes of virus-diseases, analyses of food and water to obtain safe standards for consumption.

3.2 Open new medical tests centers in four provinces, Nakhon Pathom, Lopburi, Chanthaburi, and Surin.

3.3 Training of 40 medical scientists.

Education.

Educational development work carried out within the 1967 period, in accordance with the National Economic Development Plan included the Development and improvement of both quality and volume of primary education by expansion of schools, increase of equipment and teachers' training, both in the provinces and in the central administration area. Compulsory education (class 1 - 7 was also expanded, so that the number of students in this category for 1967 was 4,877,400 which is a 2.3 per cent increase over that of 1966. Out of this number, about 4,294,400 were in the primary education category (Pratom 1-Pratom 4)

In the secondary educational field, comprehensive schools have been expanded to improve the quality of students both in technical and vocational fields, and a loan contract was signed with Canada in May 1967, for her assistance to the amount of 19.2 million Baht which will be used in the transformation of the central secondary schools as well as those in the provinces into those for comprehensive education, which will be the transformation of 19 existing schools, and an establishment of a new one, out of which six have already been opened for teaching in 1967. Students who have completed their course of studies at these comprehensive secondary schools will be able to work as skilled workers of an average skill, or may continue their education in higher institutions.

A project under way for the development of vocational secondary education is that of the project on the 120 million Baht loan of the IBRD to develop 25 vocational schools. From the beginning of this Project to July 1967, a Master Plan had been made by a Japanese architectural firm, while construction was started on buildings and equipment on land bought at three locations in Korat, Nakhon Sawan, and Chiang Mai. Technical

industrial, and agricultural teachers have also been sent for further training in the U.S. with U.S. assistance.

College education has been developed both in central universities and those in the provinces, particularly in the increased admittance of students in provincial universities in 1967, to relieve the load in the central universities. The establishment of a Medical Faculty at the Ramatibadee Hospital with the assistance of the Rockefeller Foundation has made good progress in the erection of the Faculty's buildings, and students have already been admitted and were temporarily settled in the Medical Faculty of the Siriraj Medical School in 1967.

1968 Projects.

Most of the educational development work during the phase of the second NESD Plan, particularly in the year 1968, are the continuation of the 1967 plans. In 1968, emphasis is being put on the promotion of the comprehensive schools, and vocational education development, as well as improvement of newly founded universities, such as those at Chiang Mai, Khon Kaen, and in the South. Another Medical Faculty will be set up at the Ramatibadee hospital, which has received full budget allocation so that the work can be completed within the time scheduled.

Educational development budget, and budget for universities for 1968 have been set at 1,182.98 million Baht, including that for administrative purposes.

1. General Education Department and provincial administrative bodies.

1.1 Kindergarten Education. The General Education Department has made provisions for the establishment of three kindergarten institutions at Ang Thong, Phetchaburi, and Si Sa Ket, in 1968. Improvements and repairs are to be made on the existing schools.

1.2 Work on the first stage of Primary Education. For 1968, compulsory education is to be imposed on 113, 986 more children in the 7-15 age group. Construction of additional buildings in schools is to be made to accommodate about 103,586 students, as well as construction of new schools in 130 places to accommodate 10,400 more students. 390 additional teaches will also be recruited, while part of this work will be transfeed to the local provincial administrative bodies, which will open new rooms to accommodate about 64, 816 more students under the compulsory education scheme, and to produce 2,400 more teachers.

As to the remaining work of the General Education Department which is not transferred to the Local provincial administrative bodies, measures will be introduced to increase student admittance proportionate to the needs.

1.3 Work on the Final Stage of the Primary Education. Former targets have aimed at admitting 24,000 more students who have completed their first stage in primary education to further primary education in the final stages so that with former students, there will be about 36,000 students in this category, 1,020 teachers will also be added, while 154 school buildings will be set up, together with 155 complementary buildings.

Besides these, former projects have also aimed at the admittance of 9,600 more students in the provinces where compulsory education is to be enforced, with an increase of 360 teachers, construction of 60 school buildings and 60 complementary buildings. But, as most of this work has been transferred to the provincial administrative bodies of the Ministry of Interior, there has as yet been no announcement for the enforcement of compulsory education for 1968. The provincial administrative bodies, will on the other hand, make general improvement for the overall final stages of primary education by accepting about 38,500 students with 1,100 new school rooms and school buildings to be constructed, and the number of teachers will be increased.

As for the other part of work which still remains under the administration of the General Education Department, the Ministry of Education measures will be taken to increase student admittances and school buildings as needed.

1.4 Works towards Charitable Educational Institutions. The General Education Department will open two more schools, namely, a school for the Deaf at Khon Kaen, and an Education Welfare School at Surattanee, as well as improvement of the schools' standards as originally set up in the Plan 's goals.

1.5 Adult Education. This project aims at producing a higher rate of literacy , by sending out Thai volunteer teachers to teach in various areas, such as prisons, detention houses, and in the schools for the Islamic communities (Pornor) in the South

If the budget allows, five more adult education centers will be opened. But as the 1968 budget is somewhat limited development and improvements will be made only on existing work namely in adult education at primary, secondary, and vocational levels in 553 schools and in opening 365 library services, and organization of audio-visual methods for various provinces and ampoes and to set up 75 audio-visual mobile units.

1.6 Project for School Inspection. According to the development plans for 1968, the General Education Department will arrange an average of two seminars each year for schoolinspectors in various regions and provinces which will take in 120 inspectors for training at each seminar, 240 more Department, Regional and Provincial School inspectors will also be added, while about 20,000 copies of teachers' guidebooks on the eight groups of subjects will be published.

As school inspection work is important in the improvement of the primary education standards, the Department of General Education budget for 1968 may fix the annual seminars at five per year, with 12 training sessions given each year, while 780 more teachers will be transferred from other work to carry out the work on school inspections.

2. Secondary Education Department

2.1 Secondary and Pre-University Education According to the Plan's targets 22 more schools are due to be constructed, with 45 more classes for the Matayoom Sueksa (MS) 1 added, 25 for M.S. 4, which would mean on increase of 2,555 students for the M.S. 1 classes and 875 more in the M.S. 4 classes. in addition, consideration will also be given in the standard improvement in school inspections, teacher training, and the evaluation of educational results. As more students will be admitted, and to save the expenditures allotted by the national budget, more classes for the M.S. 1 and 4 will be increased, and 10 new schools opened. There will also be improvement in the schools, as well as improvement made in school inspections, teacher training and evaluation of educational results to produce an even better standard of education.

2.2 Establishment of Comprehensive Secondary Schools. The goals set by the Plan involve the establishment of additional comprehensive secondary schools, of category 1, with an increase of approximately 56 classrooms, and an admittance of about 1,960 students for in the M.S. 1 classes. But, as some of the school are not ready to open in 1968 as planned, only seven schools which are ready to carry out the comprehensive education programs will be opened in 1968. Standards and quality of schools already opened will be improved.

3. Teachers' Training Department.

3.1 Expansion and improvement of diploma-teachers. In 1968, an increased admittance will be made for 2,000 students in teacher training schools, as well as

improvement made in 26 teacher training schools and teachers colleges in accordance with goals set in the NESD Plan,

3.2 Expansion and Improvement in the Production of University-Graduated Teachers.

According to original targets, 455 more undergraduates will be admitted in 1968, with the increase of professors, and instructors and three more teaching buildings, dormitories and training centers, as well as improvement made to three colleges of education, at Prasarnmit, Pâhtum Wan, and Bangsan, including improvement of the pilot schools of these three educational institutions. Development and improvement work on the three educational institutions and their pilot schools will be carried out as planned in 1968, although construction work on various buildings has to be somewhat reduced, because of budget limitations.

3.3 Examination Institutions. According to Goals set by the 5-year NESD Plan, various examination methods are expected to be introduced, as well as cooperation and assistance given to various governmental bodies and organisations concerned, for which a budget of 2 million Baht has been allotted when five standard examination methods will be introduced and analyses made on the above mentioned methods. Other than these, follow-ups will be made on the various examination methods to test their accuracy and efficiency, while an Item Analysis will be made on each kind of examination, and training and instruction given to Educational Analyst on specific subjects at B.A., and M.A. levels as well.

4. Department of Vocational Education.

4.1 Loan Project for the development of Vocational Education. Improvement will be made in 1968 on three Agricultural schools, seven agricultural colleges, 14 industrial technical schools, and on vocational teachers colleges, in accordance with plans laid out in the second NESD Plan.

4.2 Expansion and Improvement of the Commercial and Industrial Schools. Work programs for 1968 include instructions given to 13,400 students, as well as improvements made on 14 schools within the Commercial and Industrial Division, which are: the Bangkok Commercial School, Thon Buri Commercial school, Vasukree Commercial School, Tangtoongjit Commercial School, Wat Bopitpimuk School, Nonthaburi Technical School, North Bangkok Technical College, Telecommunication College, Technical College of Khon Kaen, Arts School, Dress-makers School, Construction School of Uthentawai, Dusit Construction School, and Business Administration School. These measures will be in accordance with goals set by the NESD Plan.

4.3 Expansion and Improvement of High-Vocational Schools. Improvement will be made on the seven existing technical colleges to raise their standards in accordance with the aims of the NESD Plan.

4.4 Expansion and Improvement of Agricultural Schools., (outside Loan Projects) Improvement will be made in 1968 on 10 general Agricultural schools, and two agricultural schools at Lopburi and Prachinburi in accordance with targets set by the NESD Plan, while another agricultural school will be established in Ratchaburi.

4.5 Improvement and Expansion of Arts Schools.

According to original targets, improvements are expected to be made on eight women's craft schools under the UNICEF Project, as well as improvements made on the shipbuilding school and textile-weaving school of Potararm. Certain work in this field may be carried out the 1968 budget, while general improvements will also be made on men's craft schools, as well as on women's craft schools.

4.6 Expansion and Improvement of the Polytechnic School and mobile vocational training units. (short-term courses). Original targets have set improvement work on seven mobile vocational training units (short-term courses), as well as the opening of

four more units at Nakhon Sawan, Chanthaburi, Korat, and Supanburi, Budget allocared for 1968 will allow work on the original targets, namely improvements on the seven mobile units, although a change will be made in the establishment of five more units with the assistance of USOM by substituting the following Provinces instead: Nan, Uttaradit, Si-Sa Ket,, Burirum and Kalasin. Improvements will also be made on the Bangkok Polytechnic School, Thon Buri Polytechnic School, and on the Vocational Promotion School.

5. The Office of the Under-Secretary of the Ministry of Education. Work will be commenced in 1968 to follow up the development work on the education situation below the pre-university level, by collaboration with governmental organizations concerned. The Office of the Under-Secretary of the Ministry of Education will also improve and expand educational broadcasting services, vocational and educational guides work, as well as television services for schools.

6. Development of University Education.

Improvement and expansion will be made in the various faculties in the nine existing universities and higher educational institutes, on the allocation of budget for 1968 which is near to the goals set by the Plan. These are as follows:

6.1 Chulalongkorn University. Expansion and increase of student admittance in various faculties to enrol 9,484 students, while about 1,400 are expected to graduate this year. Supplementary sections are also to be opened in the Faculties of Education, Commerce and Accountancy, Political Science, Science, and Engineering, which take in a total of 848 additional students. Other than these, the Asian Institute, and the Population Research Center have also been established. Buildings of various faculties, such as those of Science, Architecture, and Mass Media will be expanded to accommodate the increased number of students.

6.2 Kasetsart (Agricultural) University. Expansion and improvement of buildings in the various faculties, as well as the opening of three new faculties of Engineering, Science, and Arts, bringing the total of students to 3,029 in 1968, while 661 are expected to graduate in the same year. Work to be carried out this year will also include the continuing research on maize sorghum and rice in conjunction with the Rockfeller Foundation from works already started last year.

6.3 Thammasat University. Expansion and improvement of various faculties, by instruction given to about 12,158 students from the various faculties of which approximately 1,900 will graduate in 1968.

6.4 University of Medical Sciences. Instruction will be given to about 1,108 medical students in the Siriraj and Chulalongkorn Medical Sciences Faculties, and 644 state registered nurses, nurses, and midwives. There will be a total of 4,283 students including those in the Dentistry, Pharmacy, Public Health, Medical techniques, Tropical diseases, and medical graduates schools, and approximately 1,057 of which will graduate in 1968.

Other than expansion work and building in the various faculties, a medical faculty will also be founded at Ramatibbaddee Hospital, to take care of about 500 patients, with a goal of producing 50-60 more doctors, about 100 nurses and nurse assistants, and scientists each year than are already produced by the Siriraj and Chulalongkorn Medical Faculties.

6.5 Silapakorn University (Fine Arts.) Work programs for 1968 will include the expansion and transfer of part of the University to Nakhon Pathom, and foundation of a new Faculty of Arts which will admit about 100 students, making a total of 644 students with those admitted in other faculties. About 100 graduates will be produced this year, together with about 100 students at diploma-level.

6.6 Chiang Mai University. Two more faculties will be opened in 1968, namely the Faculty of Education and the Post-graduate School, so that there will be a total of seven faculties in all: Science, Ethnics, Social Science, Agriculture, Medical Science, Education, and the Post-Graduate School, with a total of 3,246 students including nurse students, midwives, and sanitation students. It is estimated that about 210 students will graduate in the first stage of 1968.

6.7 Khon Kaen University will be composed of the Faculties of Science and Arts, and in 1968, basic instruction will be given in the Faculties of Engineering and Agriculture, which have about 892 students in all. It is estimated that about 42 students will graduate in 1968.

6.8 The Southern University. Construction work on the various buildings will be made in 1968, in the Province of Pattani. Only the Faculty of Engineering will be opened for instruction at this first stage of work, when about 60 students will be admitted and temporarily taken care of by the Medical Science Faculty.

6.9 Post-graduate School of Public Administration. This is a newly established institution which has taken over the Faculty of Public Administration from Thammasat University. The Faculty of Business Administration is founded with the capacity to give a Master Degree, as well as the Economic Development Faculty and that for Applied Statistics, while the training of various officials from governmental agencies is also handled by this Institue.

The conclusion is therefore, that educational development work to be carried out in 1968 has received budget allocations near the targets set up by the NESD Plan. University work in particular has received full support, so as to assure complete success in the establishment of new universities. The main problems in various educational projects are caused by shortage of teachers and qualified professors, which will hold up the work scheduled within the NESD Plan.

CHAPTER SEVEN

REGIONAL AND RURAL DEVELOPMENT

Promotion of regional and provincial development work will mainly be carried out according to the accelerated rural development and regional development projects.

Accelerated Rural Development Project

Economic accelerated rural development projects scheduled in the second NESD Plan consist mainly of rural road work, development of water resources, and other economic affairs, while social work consists mainly of village development work, medical and sanitation work, and work connected with youth centers in rural areas.

Economic Aspects.

1. Rural road work, in 1967, has been carried out in the areas of these Provinces: Ubon, Nakhon Panom, Sakon Nakhon, Nong Khai, Udon Thani, Loei, Kalasin, Roi Et, Chiang Rai, Nan and Uttaradit. This work, continued from 1966, was given foreign assistance in the forms of mechanical equipment and advisors. The following results have been achieved in road constructions: 146.6 kms. of permanent roads, 180.0 kms. of pioneer roads, and 258 kms. of temporary service roads.

Other than these, contracts have been signed with foreign countries for the increase of assistance already given on technical equipment and advisors in 1967. More provinces will come under the accelerated rural development operations in 1968 such as Phetchabun, Khon Kaen, Chaiyaphum and Maha Sarakham.

2. Development of Water Resources. Work was carried out in this aspect last year over the areas of ARD operation in 14 provinces to help those living in remote districts and who have to suffer from water shortage, by providing both a clean water supply for drinking purposes, as well as a water supply for agricultural use. Eleven water tanks were established last year, with three artesian wells and waterworks, drilling of 575 of new wells or improvement of the old ones, 72 excavations of small pools and artificial lakes or improvement of old ones. Construction of dams, weirs, and dikes has also been carried out in 32 locations, with the construction of three water reservoirs and four canals or irrigation ditches.

In addition, foreign assistance has been received in the form of artesian well-drilling machinery given to Ubon Ratchathani Nakhon Phanom Sakon Nakhon Nong Khai Udon Thani and Loei. These provinces have already made personnel preparations and opened training on the use of such foreign assistance equipment obtained through the promotion of the ARD Office to get ready for the drilling of artesian wells in 1968.

3. Economic-Business Affairs consist of four projects: the provision of work sources, vocational development, agri-business, and the packaging program. Work carried out in 1967 was mainly in vocational development and the agri-business projects, while projects for the provision of work resources and complete business projects are mainly in preparatory stages which will be continued in 1968.

3.1 Vocational Development. This includes the study of each profession in the various districts of 14 provinces within the ARD Zone, after the different aspects of

that particular district have been taken into account. The main work carried out, and emphasized to achieve permanent results is for the promotion of livestock, the promotion of better class cattle breeding, the expansion and promotion of well-bred cattle, poultry farming, and animal disease control. Promotion has also been given to income-earning family industries such as ceramics, crop plantation ranging from bananas, to potatoes and other farming crops; promotion of fish breeding in paddy fields and ponds; promotion of mulberry growing for silkworm breeding; improvement of farming standards by the use of better grade rice grains, fertilization, etc.

3.2 Agri-business has been promoted in 14 ampurs in the provinces of Sakon Nakhon, Nakhon Pathom, Ubon Ratchathani, Nong Khai, Ubon and Loei, by the basic surveys carried out, establishment of farmers' societies at an amphoe-level, training of promotional officers, managers, executive committees, inspection committees, and farm leaders. An agricultural credit system has also been set up, while marketing and sale have been improved. In 1967 there were 17,617 families members of these farmers' societies at the amphoe-level, to whom agricultural equipment and products were sold on credit in the amount of 13.2 million Baht, and among whom agricultural land holdings ranged somewhere around 320,567 rais.

Social Aspect

1. Village development. Work carried out in 1967 on this aspect involved agreement made for foreign assistance in the form of mechanical equipment which will be used in 1968.

2. Medical Sanitary Work. The following work was carried out in 1967:

2.1 Mobile Medical Units within the Areas of the ARD Operations. With cooperation of the various medical institutions, and the provincial authorities concerned, the ARD Office has sent out doctors and nurses to various districts within the ARD zone. Medical equipment, vehicles and other instruments were provided by foreign assistance which have achieved the following results so far: 23 medical units in operation over the provinces of Udon, Ubon, Kalasin, Loei, Nan, Chiang Rai, Uttaradit, Nong Khai, Sakon Nakhon, and Nakhon Phanom.

2.2 Foreign Medical Mobile Units have been provided by foreign countries which sent their doctors and nurses to work in the Provinces of Buri Ram and Si Sa Ket in February 1967, they are expected to be in operation for a 2-year continuous period.

2.3 Project for the Training of Nurse Assistants in Rural Areas. The Sanitation Department has opened training programs for rural nurse assistants in Loei, Kalasin, Udon Thani, and Nakhon Phanom, while the Medical Department has opened similar training programs in Roi Et and Ubon.

3. Youth Work in Rural Areas, include the appointment of a sub-committee for the promotion and welfare of youth in rural areas, while preparations are under way for work to start in 1968.

Work Programs for 1968

Economic Aspect

1. Rural Road Work

The ARD road construction can be divided into three groups:

1.1 Service Tracks. Most of which involve jungle clearance and grading, to allow the passage of double-axle trucks for the purpose of suppression to terrorists.

1.2 Service Tracks which are designed to be improved later and turned into pioneer roads. Same operations as in 1.1, but with the difference that surveys and planning have already been made in advance so that these roads may be developed into pioneer roads in the future for economic and social benefits.

1.3 Pioneer Roads. These are standard ARD roads, with traffic surface and other structures such as bridges, etc. These are strong and up to modern standards, and about 4-5 meters wide, raised enough to be above the water-line.

The following factors are considered and followed in the selection of areas for the construction of such roads and in ranging their importance:

(1) The necessity tc provide security and protection for the people, by taking into account the number of incidents experienced, their length of time, and their nature, as well as making a careful survey and analysis of reports received from the local districts before making decisions.

(2) There are villages of dense population per sq.kilometre within a radius of 3-5 kms, or the land structure permits the construction of footpath into these villages. If a necessity exists as in (1) above, the more weight will be given in consideration of road construction.

(3) If it is a distant area lacking means of transport either by land or by water, and the necessities of (1) and (2) above exist, then the consideration for road construction in these areas will be given more weight.

(4) Lands on both sides of the road which can be used for cultivation or other useful purposes by inhabitants of the area, per kilometre of the road.

(5) Work potentiality of each province.

The ARD roads will be constructed as feeder roads, to link communications of villages and amphoes with the State or Provincial Highways so as to create a complete means of communication in rural areas. This is to be carried out in conjunction with local administrative bodies of the provinces within the ARD zones, the details of which are given in Table 1.

TABLE 7.1

DETAILS OF ROADS TO BE CONSTRUCTED IN 1968

Province	kind of road		route	distance km.	Remarks.
Ubon	pioneer	1.	Lerngnokta-Goodchum	27.0	cont. from '67
	pioneer	2.	Pana-Trakarnpeuchpol	19.0	
	"	3.	Banhongsang-Ban-goodkaedon	4.0	
	"	4.	Bandonjik-Bontrig	30.0	
	service	1.	Bannongpue-Cha-numarn	29.0	
	tracks	2.	Bannamyeum-Ban-goodrua	30.0	
	"	3.	Bannasuang-Bannayai	16.0	

Province	kind of road	route	distance km	Remarks
Nakhon Panom	permanent	1. Srisongkram-Napracha	12.0	continue from '67
	pioneer	1 Srisongkram-Bannakae	30.0	continue from '67
	pioneer	2. Bankamsoi-Bannongsoong	28.0	
	pioneer	3. Line not defined yet	77.0	
	service	1. Bannaprachia-Banpang	22.0	
	service	2. Other service tracks	118.0	
Sakol Nakhon	pioneer	1. Goodbarg-Varijapoom	31.0	
	pioneer	2. Barn tai-Donsomhong	22.0	continue from '67
	pioneer	3. Donsomkong-Bankambid	7.0	
	pioneer	4. Bannoketa-Bansuam	13.0	
	pioneer	5. Banarkart-Bannawa	27.0	
	pioneer	6. Varijapoom-Ban sangpen	17.0	
	pioneer	7. Ban nakern-Ban nakam	40.0	
	service	1. Other service tracks	100.0	
Nan	permanent	1 Na noi-Ban natanoong	26.0	
	pioneer	1. Ban chae hang-Ban kwang	35.0	
	service	1. Service track	20.0	
Uttaradit	permanent	1. Ban huay hood-Ampur Pichai	66.0	
	pioneer	1. Ban Wangpachan-Ban parkpoon	35.0	
Nong Khai	pioneer	1. Ban srivilai-Ban nasing	24.0	continue from '67
	pioneer	2. Pioneer roads	65.0	
	service	1. Service tracks	80.0	
Udorn Thani	permanent	1. Ampurpen-Ban chiangda	35.7	continue from '67
	permanent	2. Ban pue-Ban gooddinchee	32.0	
	permanent	3. Permanent roads	45.0	
	pioneer	1. Pioneer roads	30.0	
	pioneer	2. Pioneer roads	25.0	
Loei	pioneer	1. Chiangkarn-Parg chom	61.0	continue from '67
	pioneer	2. Pioneer roads	55.0	
	service	1. Service tracks		
Kalasin	permanent	1. Bandongiam-Ban pa boon	24.0	continue from '67
	pioneer	1. In Ampur Skaskant	45.0	
	pioneer	2. Kushinaria-Ban naku	30.0	
	pioneer	3. Kushinarai-Ban good wa	7.0	

Province	kind of road	route	distance km.	Remarks.
Chiangrai	permanent pioneer pioneer	1. Ban sobbong mai-Ban sa 1. Chiangsan-Ban sang 2. Ban don pan-Ban pang ka	27.0 4.0 66.0	continue from '67
Surin	pioneer pioneer	1. Sangka-Ban darn 2. Ban darn-Ban Charas	28.0 40.0	
Buriram	pioneer pioneer	1. Nong yai pim-Ban nong tom 2. Nong ta pek-Laharn sai	11.0 18.0	
Srisaket	pioneer	1. Srisaket-Kantararom	26.0	
Roi-Et	pioneer pioneer	1. Pioneer roads 2. Pioneer roads	48.0 32.0	

2. Development Work on Water Resources.

Assistance given to rural dwellers through the provision of water supply for agricultural and drinking purposes are as follows:

2.1 Provision of Water Supply for Agricultural Purposes.

2.1 (1) Construction of weirs, dikes, and temporary water storage wells, to keep the water supply for use in dry seasons, as well as excavation of canals, and water distribution channels.

2.1 (2) Installation and distribution of water-pumping equipment.

2.1 (3) Dredging work on ponds, canals, pools,lakes, etc.

2.2 Provision of Clean Water Supply for Drinking Purposes.

2.2 (1) Drilling of wells.

2.2 (2) Excavation of pools.

2.2 (3) Drilling of artesian wells.

2.2 (4) Develop and improve existing canals, and ponds.

Work to supply water for the above two categories are carried out by the ARD Office with the cooperation of the local administrative authorities concerned. Officials trained to understand the scope and subject matter of their duties, and the details for tne provision of these water resources are given below in Table 2.

TABLE 7.2

DETAILS FOR THE PROVISION OF WATER RESOURCES IN 1968

Province	Kind of Water Resources	Quantity	Remarks
Ubol	1. Shallow ponds 2. Artesian wells 3. Pool excavation	50 10 12	
Nakornpanom	1. Shallow ponds 2. Artesian wells 3. Pool excavation	51 10 31	
Sakon Nakhon	1. Shallow ponds 2. Artesian wells 3. Pool excavation	50 10 15	
Nongkhai	1. Shallow ponds 2. Artesian wells 3. Pool excavations	50 10 12	
Udorntani	1. Shallow ponds 2. Artesian wells 3. Pool excavations	50 10 10	
Loey	1. Shallow ponds 2. Artesian wells 3. Pool excavations	50 10 12	
Kalasin	1. Shallow ponds 2. Pool excavations	50 1	
Roi et	1. Shallow ponds 2. Pool excavations	50 2	
Chiangrai	1. Shallow ponds 2. Pool excavations	50 4	
Nan	1. Shallow ponds 2. Pool excavations	50 13	

Province	Kind of Water Resources	Quantity	Remarks
Uttaradit	1. Shallow ponds	50	
	2. Pool excavation	8	
Surin	1. Shallow ponds	50	
	2. Pool excavation	15	
Buri Ram	1. Shallow ponds	50	
	2. Pool excavation	47	
Si Sa Ket	1. Shallow ponds	50	
	2. Pool excavation	20	

3. Economic-Business: Work in this field includes the arrangement of work resources, acceleration of the solidification of various work, agri-business, and a package program for the setting up of an agricultural work system.

3.1 Arrangement and Provision of Work Resources.

3.1 (1) Setting up work resources in every amphoe within the ARD zone, over a 1,000 rai of land, in accordance with the authorities empowered by the Provincial Governors

3.1 (2) With the use of the ARD's mechanical equipment, or with the mechanical instruments provided for village development, forests were cleared to lay pioneer or service tracks to work resource areas, as well as construction work made in the work source area.

3.1 (3) Mapping of the work resource areas and land management to provide roads, grazing grounds, public water resources, and to provide about 15 rais of land to each family within the Work Resources area.

Works on road construction, water resources, etc. will be carried out by the use of the ARD's mechanical equipment, or the instruments especially assigned for the village development works.

3.1 (4) To select people according to the work groups in the Work Resource area.

3.1 (5) Together with the Bank for Agriculture and Agricultural Cooperatives, measures will be introduced to operate a long-term credit system of 2,000 Baht each for the members of the Work Resources Community to build their houses, and a medium-range credit for their subsistence before the yields of their production at 1,000 Baht each, as well as short-term credits of 1,000 Baht for seasonal cultivation each, making a total loan of 4,000 Baht to each case.

3.1 (6) The authorities concerned will make arrangements so that their officials can help plan the members' lines of work, give them advice on the methods of soil and water conservation, on the use of suitable fertilizers, on the selection of the

kinds of crops and good breeds of livestock, on the cultivation of their land, and on comprehensive farming, on fish breeding, livestock breeding, and family industries all in accordance with each case's potentiality and capacity.

Once members of the Work Resources Communities are started on their work as outlined, above the authorities concerned will promote the formation of farmers' societies to proceed further with the Agri-business projects.

3.2 Vocational Development

Acceleration will be made on the development of work already existing in the ARD zone, by concentrating equipment received for assistance in 1968 on work which promises progress from those started in 1967, or promotion of the well-bred dairy cattle rearing, promotion of certain species of fishes to be bred in paddy fields, such as the Nil fish, promotion of mulberry growing, of poultry farming, and various measures taken to control animal and pest diseases. Various crop cultivation will also be promoted, such as vegetables, rotation of crops, plantation of various kinds of tree crops. Other works will be involved with pilot farms, pig rearing, increased rice production, and two crop rice farming annually.

Other than these, there will also be certain programs for specific provinces such as the grouping of local inhabitants for one branch of work, assistance given to hill tribes, centers to provide agricultural services, irrigation systems, duck rearing, cotton weaving by hand methods, wood carving, control of plant pests and diseases, and control and elimination of animal diseases.

Agri-business.

To solidify those who make their living out of the land and agriculture, as well as officials of various authorities concerned, federations will be set up from the existing farmers groups at the village or hamlet levels, such as the Rice Department's Farmers' group, the Agriculture Department's Agricultural Groups, the Administration Department's People Irrigation Society, etc., so that they can carry out the following programs

1) Purchase agricultural equipment for joint use at low prices.

2) Produce an even wider and faster credit system for agricultural purposes.

3) Produce and arrange markets and industries according to the agricultural products and production.

Agri-business for 1968 consists of the expansion and promotion of agri-business groups already established in 1967, and the organization of new agri-business groups as follows:

3.3 (1) Promotion of the Agri-business Group founded in 1967, in 14 amphoes of the provinces of Sakon Nakhon, Nakhon Phanom, Udon Thani, Nong Khai, Ubon, and Loei. This promotion will be made through encouragement of the plantation of crops introduced in 1967, other than rice, to turn them into main staple crops; encouraging the agri-business group carry out its own administration to increase the groups' income, and to solidify their members' economic situation, while more encouragement will be given, as well to work for the promotion of farmers welfare and the group's credit system.

3.3 (2) Agri-business Groups will be establlshed in 14 additional amphoes in the provinces of Sakon Nakhon, Nakhon Phanom, Udon Thani, Nong Khai, Chiang Rai, Nan, Uttardit, Phetchabun, Roi Et, Maha Sarakham, and Khon Kaen. Training will also be given to extension officers, managers, the executive committees, and inspection committees, group leaders, while a credit system will be established and marketing arranged.

3.4 Agri-business Package Program.

This form of assistance given to farmers is carried out according to the Agri-business plan, by bringing technicians in various fields to work in the various areas, to introduce new farming and agricultural methods to farmers in the ARD zones. Encouragement will be given at the same time, that these farmers run their farms in the form of business commitments, which will be started in 1968. Irrigation systems will be provided for farmers of that particular area, so that a water supply is insured throughout the year for cultivation purposes. Advice will also be given on the management of land to produce maximum yields, while training will be given to farmers on the know-how of business management of their farms, as well as arranging credit systems for the products of crops under promotion.

Social Aspect.

1. Village Development Works.

Today's village still have a lot of basic needs to be met, therefore promotion should be given to increase the capacity of the local administrative bodies to reach the need of inhabitants of the village as well as to win their friendship. Also in some village in some provinces Communist subversion work is carried out so vigorously that there is more necessity that the local administratives' capacities to reach the heart of the villagers and to provide the various forms of service be increased.

1.1 Development of the Village at the Province Level. will be made through the use of mechanical equipment specially assigned for the village development work to construct or improve roads leading to the village pools, water storage, road networks within the village and public places, clearance of jungles, and improvement of the drainage ways, etc. This work will be carried out only in provinces which have received foreign assistance in the form of various mechanical equipment

1.2 Village Dvelopment at the Amphoe Level. This will be carried out only in areas where Communist subversive actions are continuing with increasing vigor. A development unit will be set up which will have a small set of construction mechanical equipment for small miscellaneous work in the zones of the police major operations, with development officers stationed in these village. This work will take the form of work initiated by the local inhabitants themselves, such as maintenance work or development of the existing inter-village roadways, land clearing, or ploughing work for cultivation, the construction of small weirs, or any other work requested by the village, of the village Council, or the Farmers' group of the village-level.

The following village development work will be carried out in 1968.

Ubon	40	village
Nakhon Phanom	30	village
Sakon Nakhon	20	village
Nong Khai	20	village
Udon Thani	20	village

Loei	33	village
Chiang Rai	6	village
Nan	6	village
Uttaradit	5	village

Work for Kalasin and Roi Et, will involve the construction of roads to the villages for a distance of 80 kms.

2. Medical and Sanitary Works.

The medical and sanitary administrative committee within the ARD zone, has a project to co-ordinate and expand its work to reach the public more rapidly and more extensively by the establishment of a mobile medical unit to give medical care, disease prevention, and promotion of better health for inhabitants of the ARD zone, while medical supplies and pharmaceutical products will be given to various provincial hospitals, and the Health stations which will be used as base by these mobile units. There are projects for the training of tambol assistant nurses, which is a project in support of the mobile medical units in that local people will be trained to give permanent assistance on medical and sanitary matters. Moreover, there are projects for foreign mobile medical units, for which doctors and nurses will be sent by foreign governments under the Colombo Plan in their collaboration with the government of Thailand to promote works on public health and sanitation, so that medical care will be extended to people in the ARD zone with promptness to meet demands and necessities.

2.1 Mobile medical Units, 15 of which will be in operation.

2.1 (1) Project for Chiang Rai 2 units.

2.1 (2) Project for Loei 1 units.

2.1 (3) Project for Roi Et 2 units.

2.1 (4) Project for Ubon Ratchathani where there will be doctors from several medical institutionsin joint operations - 2 units.

2.1 (5) One unit of the Bangkok Municipality in operation at Chaiyaphum.

2.1 (6) Various units for which their zones of operation have not as yet been defined 7 units.

2.2 Foreign Mobile Medical Units. There will be a foreign mobile medical unit each in operation in the provinces of Buri Ram and Si Sa Ket, and which will have the local Provincial hospitals as their bases. They will give medical service together with the Thai doctors in various amphoes for a reasonable period of time.

2.3 Training of Assistant Nurses in the Various Villages.

2.3 (1) Sanitation Bureau

Practical training will be given to 70 village assistant nurses who have had their 3-month theoretical instruction for those of the provinces of Loei, Kalasin, Sakon Nakhon, Nakhon Phanom, Kong Khai. Six month of training, theoutical as will as practical instruction will be given to 211 tambol assistant nurses in Loei, Kalasin, Ubon Thani, Sakon Nakhon, Nakhon Phanom, and Nong Khai.

2.3 (2) The Medical Department

To give pratical training to Ubon Ratchathani's 59 assistant nurses

who have received their 3-months theoretical instruction.

2.3 (3) The Medical Faculty of the Chiang Mai University.

Practical and theoretical training will be given to 100 village assistant nurses from Chiang Rai, Nan, and Uttaradit.

3. Rural Youth Works.

Establishment of youth centers in Ubon, Roi Et, Nong Khai, Si Sa Ket, Nakhon Phanom, and Buri Ram on the approval of the sub-committee for the welfare of rural youth, and the Central Committee for Rural Accelerated Development, by surveys and establishment of 20 youth groups. Other work carried out includes the selection and of training the Youth Advisors, and Leaders, as well as arranging mobile training units to train the Youth groups, promotion of work among the groups by providing various equipment and instruments, provision of local musical instruments, agricultural equipment, and promotion of animal rearing. Other than these, inspections and statistical research have been carried out on the groups, with promotion given to the students' volunteers camps, such as inspection made on the camping sites, various equipment and instruments lent, as well as making transport arrangements and providing vehicles, and making visits and giving advice to solve various problems for these volunteers

REGIONAL DEVELOPMENT PLAN

To concentrate all forces on the overall economic development of the country, the government has initiated the regional development concept, by its appointment of five committees for Regional development, namely that for the North, North-East, South, East, and West. Their sphere of responsibilities will cover a total of 61 provinces, over approximately 28 million people. It will be their duty to look after the economic and social affairs of the people in these various regions so as to find out the real needs of these people and thus be able to introduce necessary measures in the solution of various problems and obstacles, in the path of these regions' development, as well as to promote development work to respond to the needs of the regions' inhabitants. The Committees have four ways of raising funds to meet their expenditures, namely, from the Central budget, either initiated by the Committees themselves or by the committee's encouraging measures to be taken by the various authorities concerned; from the Committee's own budgets, from loans, foreign assistance, and finally from the budget of local adminitrative bodies, and from the contribution of private funds.

The various Regional Development Committees have the following plans for 1968 which can be summarized as :-

1. The Northern Regional Development Committee. One of the main projects which the Committee is promoting is the development of Tak Province into one of the development centers of the North. Work is under way for the establishment of a provincial administrative center, the establishment of a Technical College of Tak, promotion of agricultural work by the establishment of fishing and livestock pilot stations. Work for other provinces, on the other hand, includes the construction of rural highways, and the private irrigation systems. The Committee also is interested in promoting agricultural work, particularly in the plantation of fruit plants in the upper part of the North, for which a special sub-committee has been delegated to look into the possibilities.

Moreover, to introduce more definite structures in the development trend, the Committee is presently negotiating for U.N. assistance, through the sending of experts to help draft a plan for the Northern Region development. This will be carried out in two phases, namely, a short term between 1969-1971, and a long term range for the next 10 to 15 years. This Northern Regional Development Plan will concentrate on bringing about optimal co-ordination of the regions' economic, social and natural resources so as to bring out the most benefits.

2. The North-East Regional Development Committee. The main policy of this Committee is to promote work among the people. Projects which are receiving special attention are for the promotion of livestock-breeding ranging from cattle to pigs and poultry. The Committee has encouraged the growth and expansion of various breeding centers and has arranged for a public grazing pastureland in every province where natural conditions support livestock rearing. This aspect of the work will be expanded even further in 1968, while poultry farms in certain suitable areas will also be initiated. The Committee has also given considerable importance to public utilities projects, such as the construction of rural highways, and the provision of clean water supplies for consumption and other uses. Also, the Committee will introduce measures to relieve the farmers who have received damage by the drought during the harvest season of 1967, through provision of other work, as well as introduction of other crops to lessen any problems which might be caused by future droughts.

As far as long-term measures are concerned, the Committee feels that this development work of the North-East Region is of great necessity and urgency, particularly in promoting national security. Thailand has found it necessary to seek assistance from her friends who are ready to help in this economic and social development without imposing any political obligations. For these reasons, the Cabinet has authorized the North-East Regional Development Committee to draw up both short-term and long-term measures for the development of this region, with the assistance of USOM. Such planning will be concentrated on the introduction of measures to answer the needs of the people as well as to promote greater co-ordination among various development projects being carried out by several governmental bodies, particularly work for accelerated rural development. It is estimated that once such plan has been completely drawn up, Thailand will receive additional help from her friends, and will be able to concentrate her natural resources, financial and labor forces to develop this North-Eastern Region with even greater efficiency.

3. The Southern Regional Development Committee The Southern Region is presently having to face the great price slump of their crude rubber, and the shortage of rice which has increased the price. The solution of these two problems will have to be made by the central administrative government which will need considerable time. However, as far as the Southern Regional Development Committee's work is concerned, promotion and assistance had been given to various provinces in the construction of rural roads, and in the promotion of work and employment. The Committee has paid special attention to educational matters, and has promoted the establishment of the Songklanakarind University at Pattani, which will also have branches in other provinces, such as Songkhla. The Committee also has a special policy of educational promotion in the border provinces, while another main project will be that of the dredging of water channels in the various provinces in the South, which is receiving particular attention and support from the Committee, such as in Narathiwat, and Pattani.

4. The Eastern Regional Development Committee. Most of the Eastern boundaries are composed of eastern coastal areas, which have great potentialities for development in agricultural, fishing, industrial and commercial activities. As the government already has several basic projects, such as the State Highway projects, the development of this region could be made with greater ease than in other regions. However, there are still several underdeveloped areas, particularly in the areas next to Cambodia, so that the Committee has given special attention to this part, by promotion of the highway construction from Trat to Klong Yai, and projects for development of barren lands in

some amphoes, such as Amphoe Ta Phraya.

The Committee has also given special attention to social development, and has initiated the establishment of the Eastern Technical College, and the Dentistry School at Chon Buri, as well as giving assistance to several state schools, sanitation stations, and several schools on various islands. The Committee will also promote the establishment of a Medical Faculty in Chanthaburi in the future while the Committee will continue its works for 1968 by adhering to its former policy.

5. The Western Regional Development Committee. The majority of the Committee's work is concentrated on the construction of rural highways, and its work on other public utility services, such as pools and ponds. The Western region has an abundant supply of natural resources, with great potentialities for developments in agricultural, fishery, and forestry aspects, even more so once the Vajiralongkorn Dam has been completed. It is estimated that for 1968 and for the following years, the Committee will follow this basic development trend of making more and better use of the present supply of natural resources.

One could conclude therefore, that the various Committees for the Development of the five Regions, have played important parts in helping the government to develop the country. The budget for regional development in 1968 will total 50 million Baht. However, the Committees also play their party in promoting the projects of the cheek administrative bodies to be allotted budgets by the National Budget, as well as to be given loans and foreign assistance, so that it is indeed advisable for the government to encourage the effective activities of the Regional Development Committees.

APPENDIX*

DEVELOPMENT EXPENDITURES UNDER THE SECOND ECONOMIC AND SOCIAL DEVELOPMENT PLAN FOR THE FISCAL YEAR 1968 CLASSIFIED BY GOVERNMENT AGENCY AND BY MAJOR PROJECTS

* FIGURES IN THE APPENDIX REVISED NOVEMBER 1967

1968 ECONOMIC AND SOCIAL DEVELOPMENT EXPENDITURES

(million baht)

Sector	Budget	Foreign Aid	Foreign currency	State enterprises	Total
Economic Development Budget					
1. Agriculture and cooperatives	1,652.15	96.68	303.00		2,051.83
2. Industries	138.44	18.56	-		157.00
3. Commerce	4.10			0.50	4.60
4. Communication and transport	1,818.85	57.32	906.89	866.76	3,649.82
5. Power	341.36	82.94	518.71	362.14	1,305.15
Total A	3,954.90	255.50	1,728.60	1,229.40	7,168.40
Social Development Project					
1. Community Development	257.99	5.82	50.00	-	313.81
2. Public Utilities	366.95	-	171.00	-	537.95
3. Education	1,182.98	104.02	60.20	-	1,347.20
4. Public Health	514.22	101.74	-	-	615.96
Total B	2,322.14	211.58	281.20	-	2,814.92
Accelerated Rural Development (ARD)	186.50	210.10	-	-	396.60
Total (A+B+C)	6,463.54	677.18	2,009.80	1,229.40	10,379.92

1968 EXPENDITURE FOR AGRICULTURE AND CO-OPERATIVES DEVELOPMENT

(MILLION BAHT)

BY GOVERNMENTAL BODIES/PROJECT	BUDGET
Ministry of Agriculture	
Office of the Under-Secretary	40.23
1. Agri-Business Project	7.05
2. Agricultural Development Centres Project	
2.1 Agri-Centre in The Ditch and Dike Project Area	4.26
2.2 Agricultural Centre in The North-East	6.99
3. Agricultural Promotion	2.85
4. Agricultural Aviation Services	19.08
Department of Agriculture	89.95
1. Survey, Experimentation And Research	
1.1 Research In Agricultural Experimental Stations	21.97
1.2 Research And Experimentation In Ditch And Dike Project Area	1.06
1.3 Survey And Research On Plant Pests And Plant Diseases	3.99
1.4 Botanical Survey And Research	0.39
1.5 Research On Soil And Pertilizer	9.58
1.6 Research On The Control Of Plant Test And Diseases	1.01
1.7 Agricultural Toxicology Research	4.69
2. Economic Crop Development	
2.1 Rubber	16.40
2.2 Cotton	7.25
2.3 Maize And Sorghum	3.20
2.4 Coconut	1.52
2.5 Oil Palm	0.15
2.6 Jute	1.75
2.7 Mulberry And Silk Worms	3.44
2.8 Other Economic Crops	5.74
3. Promotion And Extension Services	
3.1 Promotion And Extension Services	1.27
3.2 Farm Mechanization Training	0.47
3.3 Plant Pest And Disease Control	6.07
Department of Rice	71.46
1. Research And Experimentation	
1.1 Rice Variety Tests	3.46
1.2 Rice Experimental And Multiplication Stations	17.15
1.3 Technical Research	6.39

(MILLION BAHT)

BY GOVERNMENTAL BODIES/PROJECT	BUDGET
1.4 Agricultural Experiments In The Ditches And Dike Project Area	3.41
1.5 Rice Protection Research And Training Centre	2.00
1.6 Research On Farm Equipment And Machinery	2.00
1.7 Research On Soil Fertility	1.80
2. Rice-Farming Promotion Services	
2.1 Promotion And Extension Services	12.98
2.2 Rice Pest Control	15.33
2.3 Large Scale Rice Demonstration Farm	5.07
2.4 Farm Mechanization Promotion And Training	1.87
Department of Fishery	46.99
1. Development Of Fresh Water Fishery Project	
1.1 Fresh-Water Fishery Development	21.26
1.2 Fishery Development In Ditches And Dikes Project Area	2.26
1.3 Rehabilitation Of Public Fishing Area	2.06
1.4 Regional Agricultural Research Centre	0.25
1.5 Fishery Demonstration And Experimentation At Huay Siton	0.29
2. Development Of Brackish-Water Fishery Project	
2.1 Development Of Brackish-Water Fishery	1.41
3. Development Of Marine-Fishery Project	
3.1 Development Of Marine-Fishery	18.69
4. Development Of Fishing Occupation Project	
4.1 Development Of Fish Industries	0.77
Department Of Live Stock	75.34
1. Promotion And Improvement Of Livestocks Project	
1.1 Improvement Of Breeds	25.48
1.2 Promotion Of Good Breeds	2.87
1.3 Artificial Inseminated Breeding	3.34
1.4 Improvement And Expansion Of Swine Breeds	2.63
1.5 Promotion Of Dairy-Farming	2.09
1.6 Agricultural Development In The Ditches And Dikes Project Area	1.42
1.7 Animal Food Provisions	2.81
2. Project For The Prevention And Control Of Animal Diseases	
2.1 Control Of Animal Diseases	24.45
2.2 Vaccine Production	6.41
3. Research And Experimentation Project	
3.1 Veterinary Research	2.48
3.2 Animal Husbandry Research	1.36
Department Of Forestry	107.14
1. Survey And Research Project	
1.1 Forest Resources Survey	6.82
1.2 Silvicultural Research	1.57

(MILLION BAHT)

BY GOVERNMENTAL BODIES/PROJECT	BUDGET
1.3 Watershed Management Research	3.72
1.4 Botanical And Zoological Research	0.63
1.5 Wood Technology Research	1.77
1.6 Establishment Of A Research Centre For Wood Products	0.83
2. Forest Protection And Control Project	
2.1 Forest Reservation	11.38
2.2 Forest Care And Protection	27.21
2.3 Control Of Forests Under Grants Of Concession	14.76
2.4 Wild-Life Conservation	1.86
2.5 Marshland Woods	1.84
3. Project For Forest Management And Maintenance	
3.1 Forest Management And Wild Forests Improvement	9.26
3.2 Reforestation	20.21
3.3 Management Of Botanical Gardens And National Parks	5.28
Royal Irrigation of Department	933.86
1. General Irrigational Projects	
1.1 Survey For Irrigational Works	12.12
1.2 River-Training And Maintenance	10.86
2. Construction Projects Of The State Irrigation	
2.1 Mae Yom - Phre	25.11
2.2 Mae Klong Yai - Karnchanaburi	181.62
2.3 Mae Tang - Chieng Mai	29.97
2.4 Lampao - Kalasin	65.18
2.5 Lampraplerng - Nakhon Rajasima	17.61
2.6 Kang Krachan - Petburi	22.99
2.7 Kew Lom - Lam Pang	36.65
2.8 Lam Takong - Nakhon Rajasima	46.70
2.9 Ta Chiat - Pattalung	17.99
2.10 Nong Wai - Khon Khan	68.11
2.11 Nam Oun - Sakol Nakhon	21.01
2.12 Phasom - Uttaradit	179.74
2.13 Nam Pran - Prachuab Kirikan	22.80
2.14 Pattani	8.27
2.15 Bhumipol Dam	0.40
3. Project For The Construction Of General Irrigational Works	
3.1 Water-Reservoir For The North-East	49.14
3.2 Irrigational Works At Muang Fai	60.80
3.3 Ditches And Dikes	24.95
4. Project For The Development Of The Chao Phya Basin	
4.1 Drainage Of The Basin Lowlands	24.16
4.2 Water-Reservoir At Kra Siew	17.68
Department Of Land Development	51.14
1. Project For Land Classification And Land Census	
1.1 Land Classification	10.45

(MILLION BAHT)

BY GOVERNMENTAL BODIES/PROJECT	BUDGET
2. Land Improvement And Conservation Project	
2.1 Land Fertilization	8.07
2.2 Soil And Water Preservation	11.39
2.3 Promotion Of Land Development	2.37
2.4 Experimentation On Pastureland Preservation	0.34
2.5 Development Of River Basins And Wood Research Centre	1.30
3. Land Policy	
3.1 Survey Of Land Tenures	3.02
3.2 Technical Services In Land Re-Settlement	1.51
4. Soil Survey Project	
4.1 Land Survey And Analysis	9.43
4.2 Land Classification Works Under UNSF'S Assistance	3.26
Department Of Credit And Marketing Co-Operatives	6.30
1. Project For The Establishment Of Credit And Marketing Co-Operatives	
1.1 Credit Co-Operatives	1.54
1.2 Credit Co-Operatives For Production	1.69
1.3 Rice-Marketing Co-Operatives	0.99
1.4 Marketing Cooperatives For Agricultural And Insustrial Products	1.06
1.5 Consumers' Cooperatives	1.02
Department Of Land Co-Operatives	50.18
1. Project For The Establishment And Promotion Of Land Improvement Cooperatives	
1.1 Establishment Of Land Improvement Cooperatives In The North-East	11.01
1.2 Establishment Of Land Improvement Cooperatives In The Central Plain	10.70
1.3 Establishment Of Land Improvement Cooperatives In The North	4.70
1.4 Establishment Of Land Improvement Cooperatives In The South	3.07
2. Project For The Organization And Promotion Of Land Settlement Cooperatives	
2.1 Land Settlement Cooperatives In The North	11.46
2.2 Land Settlement Cooperatives In The Central Plain	1.97
2.3 Organization Of Land Settlement Cooperatives In The South	4.14
3. Project For The Organization And Promotion Of Land Lease And Hire-Purchase Co-Operatives	
3.1 Organization Of Land Lease And Hire-Purchase Cooperatives In The North, Central Plain And South	1.71
4. Project For Organization And Promotion Of Groups Of Land Cooperatives	
4.1 Organization And Promotion Of Groups Of Land Coorperatives	0.22

(MILLION BAHT)

BY GOVERNMENTAL BODIES/PROJECT	BUDGET
5. Project For The Organization And Promotion Of Dairy-Farming Cooperatives	1.20
Total Of Governmental Bodies	1,637.59
State Enterprises	14.56
Fish Marketing Organization	-
1. Project For Organization And Expansion Of Fish-Marketing	
1.1 Fishing Port At Surat Tanee	4.50
Rubber Plantation Organization	
1. Project For The Promotion Of Rubber Production	
1.1 Establishment Of The Second Plantation For Better-Grade Rubber	10.06
Overall Total	1,652.15

FOREIGN LOANS 1968

(MILLION BAHT)

PROJECT	FOREIGN LOANS
1. Lam Pao, Lam Pra Plerng, Metang	6.00 1/
2. Greater Me Klong, First Stage	100.00
3. Sirikit Dam	120.00
4. Pran - Prachuabkirikan	30.00
5. Lam Nam Oan - Sakolnakorn	35.00
6. Chao Phraya Project, Third Stage	5.00 1/
7. Kangkrachan - Petburi	7.00 1/
Total	303.00

Note : 1/ Remaining Loans From 1967 Which Will Also Be Used In 1968

FOREIGN AID 1968

(AGRICULTURE SECTOR)

(MILLION BAHT)

PROJECT	FOREIGN AIDS
A. The United States Of America	64.76
1. Soil And Water Conservation	4.70
2. Agricultural Business	16.00
3. Farmers' Institutions	8.00
4. Agricultural Credit	2.16
5. Agricultural Economics	1.10
6. Extension Services	8.00
7. Applied Research	19.00
8. Survey Of The Mun - Chee Basin	5.80
B. The United Nations	22.57
1. Rubber Development	4.67
2. Kalasin Pilot Farm	1.36
3. Soil Survey	3.95
4. Land Fertility	4.10
5. Plant Disease And Pest Control	4.99
6. Animal Health Centre	3.50

(MILLION BAHT)

PROJECT	FOREIGN
C. The Colombo Plan	1.00
1. Ditches And Dikes Project Area	1.00
D. Third Countries	8.35
1. Chieng Mai Dairy-Farm	1.50
2. Marine Fishery Institute	.60
3. Thai-Danish Dairy Farm	1.20
4. Improvement Of Timber Plantation	.75
5. Development Of Thai-Israel Rural Village	1.30
6. Land Settlement Project	3.00
Total	96.68

1968 BUDGET FOR INDUSTRIAL AND MINING DEVELOPMENT

(MILLION BAHT)

GOVERNMENTAL BODIES/PROJECT	BUDGET
Governmental Bodies	102.97
Department Of Industrial Promotion	12.60
1. Services For Small Industries	4.95
2. Marketing Services For Thai Industrial And Handicraft Products	2.65
3. Loans For The Promotion Of Small Industries	5.00
Department Of Industrial Works	2.23
1. Thailand's Centre For Industrial Productivity	2.23
Department Of Science	3.55
1. Scientific Industrial Research	2.78
2. Industrial Standardilization	0.77
Office Of The Industrial Under-Secretary	12.00
1. Sugar Promotion Centre	5.00
2. Industrial Estates	7.00
National Research Council	11.04
1. Technological Research Institute	11.04
Department Of Mineral Resources	61.55
1. Survey And Improvement Of Artisan Wells	35.01
2. Mining Development	7.82
3. Geological Surveys	18.72

(MILLION BAHT)

GOVERNMENTAL BODIES/PROJECT	BUDGET
State Enterprises	35.47
1. Fang Oil Refinery	21.01
2. Bangkok Dock Company Ltd.	5.26
3. Battery Organization	9.20
Governmental Bodies And State Enterprises	138.44
Foreign Aid	18.56
Total	157.00

1968 BUDGET FOR COMMERCIAL DEVELOPMENT

(MILLION BAHT)

PROJECT	BUDGET
Ministry Of Economic Affairs	4.10
1. Export Promotion	1.60
2. Promotion Of Commercial Activities For Thai Nationals	2.50
3. Marketing Research	-
4. Construction Of Rice-Silos	-
Total	4.10

Note:

1. Budget for the Industrial and Mining Projects is different from that given in the 5-year plan because the Industrial Estate Project which was expected to have started in 1967, did not receive any allotment of Budget for such expenditure, so that this Project has to be postponed to 1968.

2. There is a new project in the State enterprises, which is the Battery Organisation, so that the total sum of Budget in this part differs from the 5-year Planning. Most of other state enterprises which are not included in the 5-year Plan because they do not qualify as economic development projects, use their own income for investment, and use the allotted budget for administrative purposes to maintain the same sum of budget.

3. Most of the projects in commercial branches are not approved by the Constituent Assembly, so that most of their budgets had to be cut down for 1968. 1.60 million Baht are allotted for the exhibition of products, which are included in the export project, while another 2.50 million Baht are allotted as loans for small traders, which are included in the Project to promote commercial activities of Thai nationals. For this starting year, the Budget Bureau only allotted 50 per cent of the amount specified in the 5-year NESD Plan. (revised), to put to test, the progress of the Project as scheduled.

4. There is no loan for industrial development. Aid, which is expected for 1968 will take the form of experts, and educational training and study tours of various projects in the industrial sector according to the 5-year plan, which is to the value of 18.56 million Bahts.

BUDGET FOR COMMUNICATION AND TRANSPORTATION DEVELOPMENT

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	FOREIGN LOAN	FOREIGN AID	INCOME OF STATE ENTERPRISES	TOTAL
Office Of The Under-Secretary For The Ministry Of Communication	47.20	47.60	8.28	-	103.08
1. Survey, Research and Basic Analysis	1.50	-	-	-	1.50
2. Thailand's Institute of Transportation And Communication	0.50	-	5.60	-	6.10
3. Telegraphic Training Center	3.20	-	2.68	-	5.88
4. Construction Of Communication Network For Zones 4 and 5	42.00	47.60	-	-	89.60
Department Of Civil Aviation	105.56	-	12.35	-	117.91
5. Development Of Air Ports In The Provinces	46.50	-	-	-	46.50
6. Air-Message Transmission	17.98	-	7.35	-	25.33
7. Improvement Of Don Muang Airport	31.08	-	-	-	31.08
8. Survey For Construction Of The Second Commercial Airport	10.00	-	5.00	-	15.00
Department Of Land Transportation					
9. Survey On The Volume Of Road Transportation	1.90	-	-	-	1.90
10. Construction Of Stations For Passenger - Transports	1.77	-	-	-	1.77
Harbour Department	21.07	72.00	-	-	93.07
11. Provision Of 4 Dredgers, and 1 Cruiser	-	72.00	-	-	72.00
12. Dredging The Ports In The South					
- Songkla Dock	15.68	-	-	-	15.68
- Naratiwat And Phuket Docks	3.00	-	-	-	3.00
13. Survey On Geographical Shipping Route	2.39	-	-	-	2.39

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	FOREIGN LOAN	FOREIGN AID	INCOME OF STATE ENTERPRISES	TOTAL
Department Of Post & Telegraph	66.73	94.52	-	-	161.25
14. Expansion Of Local Postal-Telegraphic Services	20.59	-	-	-	20.59
15. Development Of Radio Contact With Foreign Countries	0.87	-	-	-	0.87
16. Tele-Communication by Means Of Satellite	45.27	94.52	-	-	139.79
Department Of Highways	1,450.54	312.75	35.45	-	1,798.74
17. State Highways					
- Construction Met By National Budget	250.70	-	21.00	-	271.70
- Construction Met By Loans	376.20	307.80	-	-	684.00
- Road Pavement By Asphalt	320.22	-	-	-	320.22
- Construction Of Roads Outside Projects	39.23	-	-	-	39.23
18. Bridge Reparations	80.93	-	-	-	80.93
19. Provision Of Road Construction Marchinery	66.79	-	-	-	66.79
20. Survey On The Chokechai - Dejudom Route	5.00	-	-	-	5.00
21. Survey On The Ban Suan Tang - Chai Nat, and Saraburi - Korat Routes	-	-	5.45	-	5.45
22. Provincial High Ways	123.05	4.95	-	-	128.00
23. Mechanical Equipment Centre					
- Mechanical Equipment Centre At KhonKhan	20.00	-	-	-	20.00
- Mechanical Equipment Centre At Mahasarakam	15.00	-	4.00	-	19.00
- Mechanical Equipment Centre At Songkra	15.00	-	3.00	-	18.00
24. Research And Study On Road Construction Materials	-	-	2.00	-	2.00
25. Provincial Highways Outside The Projects	59.50	-	-	-	59.50
26. Survey On 200 Kms. of Provincial Highways	1.00	-	-	-	1.00
27. Project For Replacement Of Worn Down Wooden Bridges By CPAC Bridges And Permanent Wooden Bridges	25.00	-	-	-	25.00

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	FOREIGN LOAN	FOREIGN AID	INCOME OF STATE ENTERPRISES	TOTAL
28. Roads Constructed By The Department Of Irrigation	52.92	-	-	-	52.92
Department Of Public Relations	0.75	-	0.79	-	1.54
29. Nation-Wide Expansion Of Television Services	0.75	-	0.79	-	1.54
Ministry Of Interior	22.26	-	-	-	22.26
30. The Ministry Of Interior's Project On Tele-Communications	22.26	-	-	-	22.26
The State Railway Organization Of Thailand	88.75	111.64	-	468.83	669.22
31. Development And Expansion Works On Lines Already Opened For Public Use	84.75	101.90	-	461.11	647.76
32. Development On The Me Klong Line	-	5.12	-	4.80	9.92
33. Survey On New Routes	-	-	-	2.92	2.92
34. Construction On The Kang Koi - Bua Yai Line	4.00	4.62	-	-	8.62
Express Transport Organization	3.00	-	-	9.50	12.50
35. Provision Of Additional Trucks And Replacement Of The Old Ones	3.00	-	-	3.20	6.20
36. Provision Of Additional Buses	-	-	-	5.30	5.30
37. Provision Of Low Bed Trailers.	-	-	-	1.00	1.00
Air Radio Company Of Thailand	3.00	-	-	-	3.00
38. Air Communication And Air Traffic Control	3.00	-	-	-	3.00
Telephone Organization Of Thailand	15.00	143.38	-	140.45	298.83
39. First Stage And Additional Extension Of Telephone Services In The Metropolis	-	51.68	-	37.93	89.61
40. Project For Expansion Of The Metropolitan Telephone Services	-	52.77	-	34.63	87.40
41. Third Development Of The Regional Telephone Services	-	-	-	17.48	17.48
42. Branches For Distant Calls	15.00	20.93	-	29.13	65.06
43. Project For Collection Of Spare Parts For Telephonic Tele-Communication Works	-	18.00	-	21.28	39.28

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	FOREIGN LOAN	FOREIGN AID	INCOME OF STATE ENTERPRISES	TOTAL
Port Authority Of Thailand	-	-	-	210.36	210.36
44. Development & Construction Of Ware Houses, Offices, Roads Etc.	-	-	-	70.90	70.90
45. Provision Of Equipment For The Transportation Of Goods And Equipment For Other Works	-	-	-	91.19	91.19
46. Construction Of Mooring Post	-	-	-	10.00	10.00
47. Construction Of A Wharf In The East	-	-	-	38.27	38.27
Thai Maritime Navigation Co. Ltd.	0.32	125.00	0.45	-	125.77
48. Improvement Of Sea Transportation	0.32	125.00	0.45	-	125.77
Transport Co. Ltd.	-	-	-	10.20	10.20
49. Provision Of Buses	-	-	-	10.20	10.20
Thai Airways Co. Ltd.	-	-	-	27.42	27.42
50. Purchases Of Airplanes And Additional Spare Parts	-	-	-	27.42	27.42
TOTAL	1,818.85	906.89	57.32	866.76	3,649.82

BUDGET FOR ENERGY DEVELOPMENT

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	FOREIGN LOAN	FOREIGN AID	INCOME OF STATE ENTERPRISES	TOTAL
1. National Energy Authority	100.68	32.50	82.94	0.87	216.99
1. Survey And Statistical Research On Hydro-Energy Resources	3.81	-	3.80*	-	7.61
2. Survey And Planning On The Use Of Electricity	1.41	-	-	-	1.41
3. Survey Of The Me Kong Basin	7.39	-	78.04	-	85.43
4. Pa-Mong	13.01	-	-	-	13.01

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	FOREIGN LOAN	FOREIGN AID	INCOME OF STATE ENTERPRISES	TOTAL
5. Lam Dome-Noi	64.60	32.50 [1]	-	-	97.10
6. Upper Lam Nam Pung	7.05	-	-	-	7.05
7. Training Centre For Electricians	0.26	-	1.10	0.87	2.23
8. Development Of Hydro-Energy At Mae Hong Son	3.15 [1]	-	-	-	3.15
2. Thai Atomic Energy Commission For Peace	5.88	-	-	-	5.88
1. Research And Services On The Use Of Atomic Equipment	5.88	-	-	-	5.88
3. Yanhee Electricity Authority	97.50 [3]	385.92 [4]	-	192.30	675.72
1. Yanhee, Third Stage	5.00 [3]	3.00 [4]	-	40.00	48.00
2. Yanhee, Fourth Stage	40.00 [6]	186.92 [5]	-	111.80	338.72
3. Nan River	15.00 [6]	26.00	-	15.00	56.00
4. Kang Riang	-	-	-	6.00	6.00
5. South Metropolitan Electricity	37.50 [7]	150.00	-	17.50	205.00
6. Link Of [illegible]tong-Nakorn [illegible]sima	-	20.00 [8]	-	-	20.00
7. Atomic Electricity - Generator	-	-	-	2.00 [9]	2.00
4. Provincial Electricity Authority	70.70	41.60	-	0.43	112.73
1. Construction And Development On The Distribution System Within The Yanhee Zone, First Stage	2.95	-	-	-	2.95
2. Construction And Development On Distribution System Within The Yanhee Zone, Second Stage	18.06	41.60 [10]	-	-	59.66
3. Construction And Development On Distribution System Within The Nam Pong Zone	10.06	-	-	-	10.06
4. Construction And Development On Distribution System Within The Kra-Bee Zone	34.12 [11]	-	-	-	34.12
5. Construction And Development On Distribution System Within The Nam Pung Zone	-	-	-	0.43	0.43

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	FOREIGN LOAN	FOREIGN AID	INCOME OF STATE ENTERPRISES	TOTAL
6. Development Of Electricity	4.50	-	-	-	4.50
7. Construction And Development Of The Distribution System For The Mae Hong Son Zone	1.01	-	-	-	1.01
5. Electricity Authority For The North-East	36.76	25.54	-	0.50	62.80
1. Installment Of The Third Electricity-Generator At Ubolrat Dam, Khon Khen	8.36	4.54 [12/]	-	-	12.90
2. Establishment Of 115 K.V. Cables - For Udorn - Nongkai	6.00 [13/]	-	-	-	6.00
3. Survey Of The Nam Prom Stream	0.90	-	-	-	0.90
4. Installment Of A Gas-Turbine Electricity Generator At Nakorn-Rajasima	21.50 [14/]	21.00	-	-	42.50
5. Survey On The Linking Cables	-	-	-	0.50	0.50
6. Metropolitan Electricity Authority	-	-	-	168.04	168.04
1. Expansion Of Electricity-Distribution System	-	-	-	168.04	168.04
7. The Lignite Authority	29.84	33.15	-	-	62.99
1. Installation Of The Third Electricity Generator At Mae-Bee	5.80 [15/]	33.15 [16/]	-	-	38.95
2. Establishment Of High Voltage 115 K.V. Cables-Takuapa - Pun Pin	4.22	-	-	-	4.22
3. Consrruction of a Diesel Electricity Plant of 10 MGW At Phu Ket	19.82	-	-	-	19.82
TOTAL	341.36	518.71	82.94	362.14	1,305.15

Note:

For The Project Of Survey On Major Clear Streams

1/ Loan From Japan

2/ New Project

3/ Last Year Of Loan From Ministry Of Finance

4/ Last Year Of Loan From The World Bank

5/ Loan From World Bank And Bank Of Thailand (84.92 Million Baht)

6/ Ministry Of Finance's Loan

7/ Ministry Of Finance's Loan

8/ Budget Of The New Planning

9/ New Project

10/ The Federal Republic Of W. Germany

11/ Total Amount Of Loan From The Ministry Of Finance In The Last Year, 15 Million Bahts

12/ W. Germany

13/ Expenditures Of Unaccomplished Works In 1967

14/ Ministry Of Finance Loan

15/ Plus Another 3.05 Million Baht Interest During Construction Period

16/ W. Germany And Austria

* For Projects Of Survey On Major Clear Streams

BUDGET FOR SOCIAL DEVELOPMENT

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	FOREIGN LOAN	FOREIGN AID	TOTAL
Land Department	19.69		-	19.69
Settlement Of Large Piece Of Land	4.33			
Settlement Of Small, Miscellaneous plots	4.66			
Topographic Maps From Aerial Photographs	10.70			
Department of Labour	8.17			8.17
Provision For Employment	0.92			
Vocational Training And Raising 1/				
Standards Of Technical Proficiency	2.25			
Protection Of Labour Force And Unions	1.00			
Research And Survey On Manpower	4.00			
Community Development Department 2/	76.92		.82	77.74
Voluntary Work For Rural Development	2.84			
Works On Rural Development Which Include Other 8 Projects	74.08		.82	
Department Of Public Welfare	153.21	50.00	5.00	208.21
General Self-Help Communities	29.06		5.00	
Demonstration Centre Of A Self-Help Community				
Self-Help Community At Nam Pong	6.86			
Self-Help Community At Lam Nam Pao	3.34			
Self-Help Community At Nan	3.50			
Development Community In The South	21.12			
Dairy-Farming Community	0.76			
Self-Help Community At Toong San	4.60			
Self-Help Community At Lam Ta Kong	3.00			
Community In Aid Of Hill-Tribes	2.47			
Mobile Unit For The Development Of Hill-Tribes	5.30			
Research On Hill-Tribes	0.65			
Research On Children And Youth	19.58			
Assistance For The Aged And The Crippled	10.46			
Assistance For The Helpless	8.44			
Assistance For Disaster Victims	2.36			
Youth Club, Activities And Rest-House				
Small-Income Earners And Crowded Residential Areas	0.47			
Assistance For The Jobless And Slightly Demented Women	6.24			

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	FOREIGN LOAN	FOREIGN AID	TOTAL
Housing Projects For Small-Wage Earners	25.00	50.00		
Total Of Budget For Social Development	257.99	50.00	5.82	313.81

Note:

1/ This Is An Aid Grant From The U.N.

2/ Reasons Why The Budget Figure Is High Is Because The Former Figure Was Not Included Budget For Administrative Purposes, And That It Is Not Possible To Exclude The Administrative Budget From This Figure.

BUDGET FOR DEVELOPMENT OF PUBLIC UTILITIES

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	BUDGET	FOREIGN AID	TOTAL
Town-Planning Bureau 1/	12.90	-	12.90
1. Project For Development		-	
A) General Town-Planning		-	
B) Special And Particular Town-Planning		-	
2. Project For Town Development 2/		-	
3. Project For Populace Development 2/		-	
4. Project For Equipment Development		-	
Administration Department	68.76		68.76
1. People Irrigation Project	)		
2. Promotion Of Wheat-Growing Project	) 23.18		23.18
3. Project For Work Promotion (Twice Yearly Farming) 3/	)		
4. Project For Provincial Highways	17.50	-	17.50
5. Project For The Provision Of Hygienic Water Supply In Rural Areas	20.00	-	20.00
6. Project For Electrical-Water Pumping System At The Me Kong	3.69	-	3.69
7. Project For Land Development At Toong Ma-Hew, Ubol.	4.39	-	4.39

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	1968 FOREIGN LOAN	1968 TOTAL
Public And Municipal Works Department	225.09	171.00	396.09
1. Project For The Construction Of Bridge Across The Chao Phra Ya At Ta Chang	22.24	10.00	32.24
2. Project For The Increased Production And Distribution Of Water	46.00	20.00	66.00
3. Provincial Water Supply Project	142.60	125.00	267.60
4. Project For The Provision Of Hygienic Water In Rural Areas (Digging Of Artisan Wells) 4/	14.25	16.00	30.25
Bangkok Municipality	60.20		60.20
1. Road Construction Project For Bangkok - Thonburi	47.00	-	47.00
2. Project For The Drafing Work Of A Drainage System	7.00	-	7.00
3. Project For The Construction Of A Drainage System	6.20	-	6.20
Total Budget For Public Utilities Development 5/	366.95	171.00	537.95

Note:

1/ This Is Not Separated Into Individual Projects, But Is Included In The Total Administrative Budget

2/ This Is Not Specified In The NESD Project

3/ Within The Budget Of The Public And Municipal Works Department, As It Is A Joint-Project

4/ Joint-Project With The Administration Department

5/ The Budget For Development Of Public Utilities Has No Foreign Grants

EDUCATIONAL DEVELOPMENT BUDGET

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	FOREIGN LOAN	FOREIGN AID	TOTAL
Ministry Of Education	714.26	30.20	71.86	816.32
General Education Department	326.74	-	1.91	328.65
1. Expansion And Development Of Kindergarten Schools	6.79	-	-	6.79
2. Administration Over Compulsory Education	309.03	-	1.31	310.34
3. Administration Over Primirary Education Secondary Education				
4. Demonstration Of Educational Systems	3.05	-	-	3.05
5. Expansion And Development Of Subsidised Schools	6.35	-	-	6.35
6. Extension Of A Dult Education	1.52	-	0.60	2.12
Secondary Education Dept.	120.03	17.40	9.68	147.11
1. Administration Over Secondary And Pre-University Education	70.76	-	7.80	78.56
2.	49.27	17.40	1.88	68.55
Dept. Of Vocational Education	186.40	12.80	38.16	237.36
1. Expansion And Development Of Technical Schools	22.75	-	0.34	23.09
2. Expansion And Development Of Commercial And Industrial Schools	13.57	-	3.00	16.57
3. Expansion And Development Of High Vocational Studies	30.37	-	6.47	36.84
4. Expansion And Development Of Agricultural Schools (Outside Loan Projects)	7.70	-	-	7.70
5. Project For The Development Of Business Study	105.66	12.80	8.25	126.71
6. Expansion And Development Of Technical Schools And Mobile Vocational-Training Unit	2.83	-	17.60	20.43
7. Project For Agricultural Engineering	3.52	-	2.50	6.02
Teacher's Training Department	74.88	-	0.51	75.39
1. Expansion And Development Of Teachers Production At Diploma Levels	58.32	-	0.48	58.80
2. Expansion And Development Of Teachers Production At Degree Levels	16.18	-	0.02	16.20

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	1968 FOREIGN LOAN	1968 FOREIGN AID	1968 TOTAL
3. Production Of Teachers For Mixed Secondary School (Included In Item 1)		-	-	-
4. Institute For Educational Research	0.13	-	0.01	0.14
5. Experimental Institutes	0.25	-	-	0.25
Office Of The Under-Secretary	6.21	-	21.60	27.81
1. Expansion And Development On Radio And Television School Works	0.59	-	3.40	3.99
2. Project For Educational Development, Part 2	5.40	-	-	5.40
3. Project For Provincial Educational Development	0.22	-	18.20	18.42
Universities				
Total Development Budget	468.72	30.00	32.16	530.88
Chulalongkorn University	63.27	10.00	3.16	76.43
Kasetsart University	56.99	20.00	-	76.99
Tammasart University	25.67	-	1.80	27.47
Medical Science University	190.59	-	4.00	194.59
Fine Arts University	9.36	-	-	9.36
Chieng Mai University	67.02	-	18.20	85.22
Khon Khan University	19.69	-	5.00	24.69
Public Administration Institute	11.67	-	-	11.67
The Southern University	24.46	-	-	24.46
Total Educational Development Budget	1,182.98	60.20	104.02	1,340.20

PUBLIC HEALTH DEVELOPMENT BUDGET

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968 BUDGET	1968 FOREIGN AID	1968 TOTAL
Ministry Of Public Health	9.78		
Office Of The Under-Secretary	9.18	47.30	57.08
1. Fight Against Malaria	7.07	45.80	
2. Control Of Foot Disease	0.59	-	
3. National Institute Of Cancer	2.12	-	
Medical Service Dept.	290.25	1.50	291.75
1. Development Of Provincial Hospitals	176.38	-	
2. Establishment Of Hospital Centre 1/	-	-	
3. Development Of Lert-Sin Hospital	9.33	-	
4. Development Of Women And Children Hospital	29.81	-	
5. Nursing College And Schools	12.56	-	
6. Development Of The Monks' Hospital	3.50	-	
7. Development Of Mental Hospitals	52.37	1.50	
8. Establishment Of Faculty Of Phychiatry In Hospitals In General 2/	-	-	
9. Research And Cure On Drug-Addicts	6.30	-	
10. Services Of Mobile Medical Units	-	-	
Sanitation Department	205.36	52.34	257.70
1. Development And Expansion Of Sanitary Stations	93.15	-	
2. Mother And Child Care	19.60	6.12	
3. Tuberchlosis Control	17.13	3.42	
4. Breast Surgery	8.19	-	
5. Nutrition Development, Fight Against Nutrition Deficiency	2.49	0.84	
6. Fight Against Leprosy	19.24	1.44	
7. Trachoma And Conjunctivities	3.97	0.24	
8. Development Of Rural Hygienic Survices	7.61	16.68	
9. Fight Against Veneral Disease	5.69	-	
10. Provision Of Clean Water Supply In The Rural Areas	15.75	23.60	
11. Control Of Yaws Of The Permanent Stage And BCC Injection	4.69	-	
12. Prevention And Control Of Infections Diseases	7.85	-	
Medical Science Dept.	6.83	0.60	7.43
1. Medical Researches	6.56	0.60	
2. Prevention Of Radiation Dangers	0.27	-	
The Government Phar Maceutical Laboratories	2.00	-	2.00
1. Development And Expansion Of The G.P.L.	2.00	-	2.00
Total Of Public Health Development Project	514.22	101.74	615.96

1/ Included in the provincial hospitals projects
2/ Included in the mental hospitals projects

BUDGET FOR RURAL ACCELERATED DEVELOPMENT

(MILLION BAHT)

GOVERNMENTAL BODIES / PROJECT	1968		
	BUDGET	FOREIGN AID	TOTAL
Rural Accelerated Development Dept. 1/			
Economic Aspects			
Rural Road Works	103.00	99.00	202.00
Development Of Water Resources	13.50	18.40	31.90
Business-Economics			
(1) Agri-Business Package Program	1.10	-	1.10
(2) Provision Of Employment Sources	1.60	20.00	21.60
(3) Provision Of Employment Sources	3.00	-	3.00
(4) Development Of Vocations	7.90	18.80	26.70
Social Aspects			
Rural Development Works	33.80	43.40	77.20
Hygienic And Medical Works			
(1) Mobile Medical Unit Within The ARD Zone	17.30	9.00	26.30
(2) Mobile Medical Units	1.20	-	1.20
(3) Training Of Rural Assistant-Nurses	3.30	-	3.30
Rural Youth Works	0.80	1.50	2.30
Total Budget For ARD.	186.50	210.10	396.60

1/ This does not include the reserved fund of 28.70 million bahts from the central budget.